



## Product catalogue



Inspiring green energy since 2003

Note: This presentation is not legally binding.  
AE Solar reserves the right to make changes  
in specifications without any notice.

WEEE DE 20958316



Deutsche  
Qualität  
Garantiert

## Born in Germany ●●●

AE Solar GmbH was founded by Dr. Alexander Maier and his brothers in Königsbrunn, Germany. AE Solar is one of the leading brands in the renewable energy industry, providing high-quality new energy products and services since 2003.

Driven by both innovations in technology and an effective brand strategy, AE Solar continuously extends the industry chain upstream and successfully executes the downstream projects.

AE Solar brand has become synonymous with high performing, top quality photovoltaic modules and specializes in PV technology innovation, application and system development. The company is a KEY COMPONENT SUPPLIER and PROJECT DEVELOPER. AE Solar's global sales and marketing network successfully provides end-users with accessible clean energy, whilst promoting its core brand values of STABILITY, DURABILITY and RELIABILITY.



■ Deutsche  
■ Qualität  
■ Garantiert



## Leading in Manufacturing ●●●

AE Solar focuses on the manufacturing of leading edge technological products and selects only the highest quality materials and components. This, together with a world-leading automated manufacturing lines enable us to offer a high-quality products at competitive price. Our German engineers are engaged to supervise the production process, testing and ensure each product meets the highest world standards.

AE Solar has been awarded SNEC Top 10 Highlights 2017, PV Magazine Top Innovation 2018 , Intersolar Award 2019 Finalist for Smart Shading Resistant Hot-Spot Free PV modules technology. We are the first company in the world manufacturing poly, mono, double glass modules with this technology.

The technology has been tested by leading PV experts - Fraunhofer CSP institute.

We manufacture in-house all kinds of conventional poly, mono, double glass and bi-facial PV modules. Our glass-glass technology is the lightest in the world using specially tempered 2 mm glasses with same wind and mechanical load capabilities as conventional 3 mm glasses providing min 25% less weight load at mounting systems and rooftops.



# AE SMART HOT SPOT FREE PV MODULES

tested by  **Fraunhofer**  
CSP



Deutsche  
Qualität  
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# Core values



Since 2003 AE Solar provides superior services to the clients and we are proud that in 2017 we have reached the number 3000 in successful installation and commissioning of solar projects.

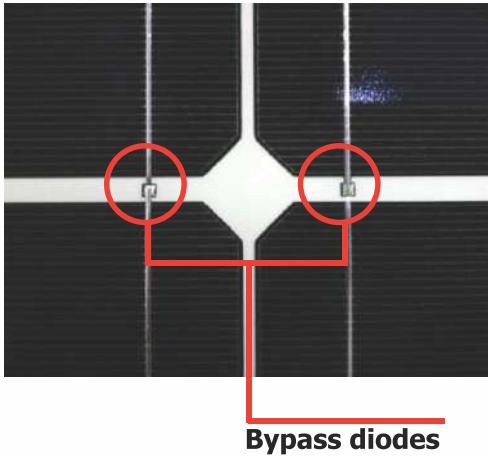
professional services and exceptional quality products are crucial to enhance customer satisfaction and loyalty, that is very important to strengthen the relationships, retain existing customers and attract new ones.



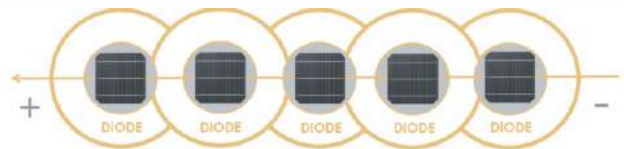
The Hot-Spot Free Modules developed by AE Solar use bypass diodes to eliminate the development of hot-spots and thus the damages and risks associated.

The temperature of Hot-Spot cells within AE Smart Hot-Spot Free Modules does not exceed 85°C. This temperature management eliminates material hazard, the safety of the module and its surroundings.

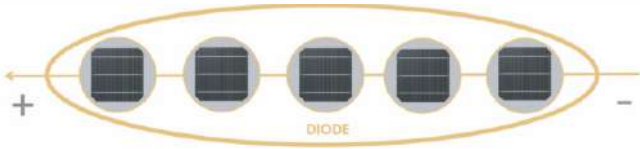
Available from 260W to 385W range, the AE Smart Hot-Spot Free Modules offer up to 30% more power output compared to standard PV Modules thanks to their improved efficiency.



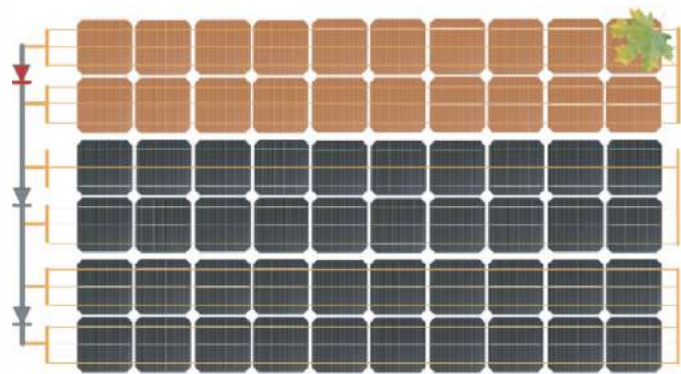
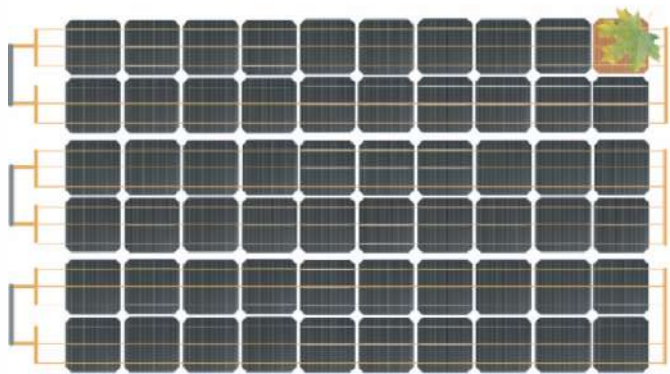
AE SMART HOT SPOT FREE MODULE



STANDARD MODULE



HOT-SPOT FREE technology protects each cell by an individual bypass diode.



In a standard module, the impact of shading on a single cell affects a whole string, while an AE SOLAR SMART MODULE with HOT-SPOT FREE technology loses the output of only one single cell during the shading.

Shading In % of a single cell	0%	10%	20%	30%	40%	50%	100%
Output from AE Smart Hot-Spot Free Module	100%	98%	96%	96%	96%	96%	96%
Output from Standard Module	100%	98%	91%	83%	73%	65%	65%
Additional efficiency in Power Generation	0	0	5%	13%	23%	31%	31%

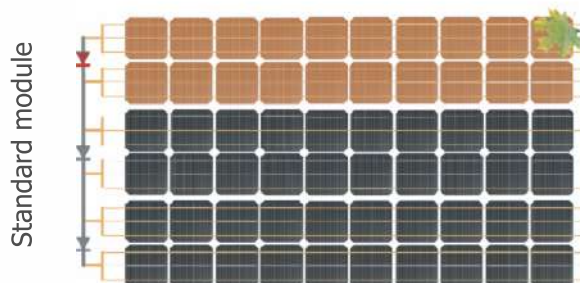
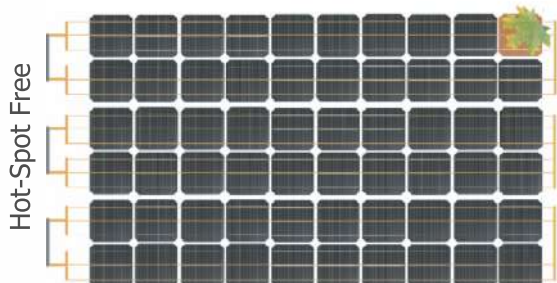




FOR INNOVATIVE  
SHADING-RESISTANT  
MODULES DEVELOPMENT



### One Cell in One String



Output from AE Smart Hot-Spot Free  
Module

95%

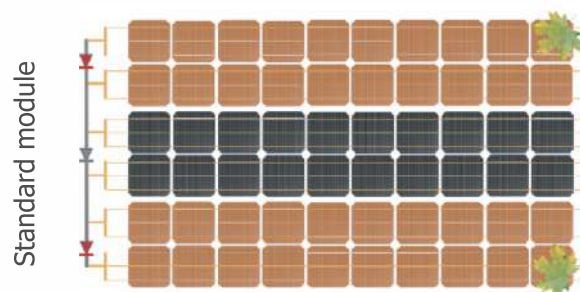
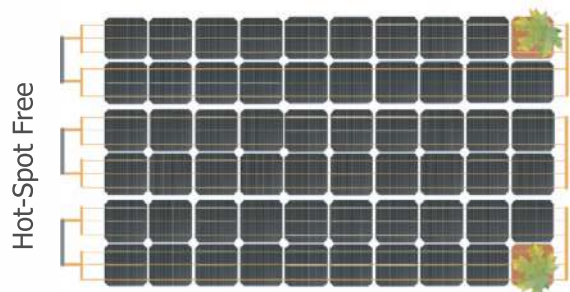
Additional efficiency in  
Power Generation

**31%**

Output from Standard Module

64%

### One Cell in Two Different Strings



Output from AE Smart Hot-Spot Free  
Module

93%

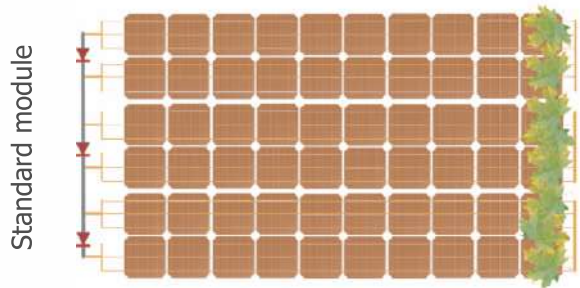
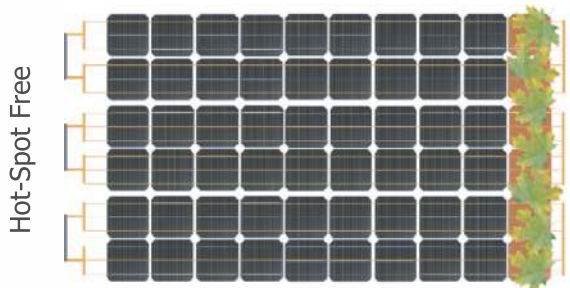
Additional efficiency in  
Power Generation

**55%**

Output from Standard Module

38%

### Row of Cells Across Different Strings



Output from AE Smart Hot-Spot Free  
Module

83%

Additional efficiency in  
Power Generation

**82%**

Output from Standard Module

1%



Inspiring green-energy since 2003

## AE SMART HOT-SPOT FREE MONOCRYSTALLINE PV MODULES AE SMM6-36 Series 180W-195W

tested by **Fraunhofer**  
CSP

36

CELLS



SHADING  
RESISTANT



HOT SPOT  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### TEMPERATURE

Hot spot temperature lower than 85°C

The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.

### SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.

### GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

### RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

### HIGH RETURNS

This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

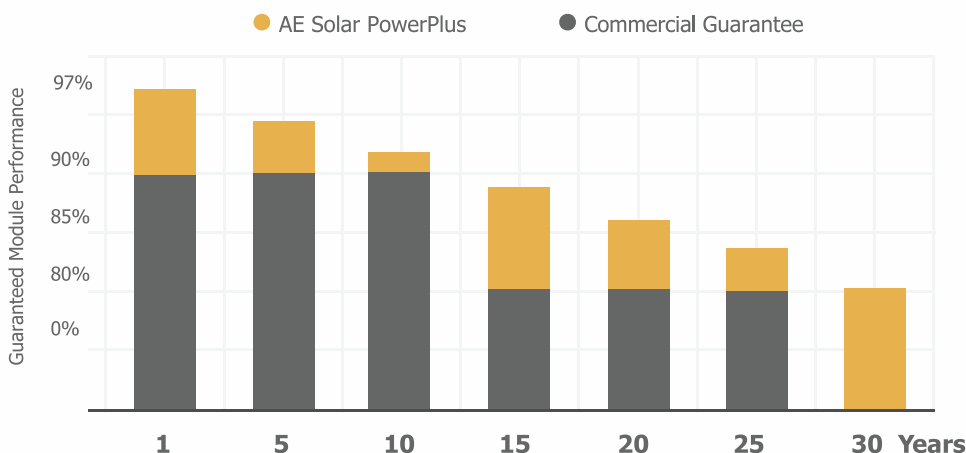
### PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

### CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE SMM6-36 Series 180W-195

## SPECIFICATIONS

AE180SMM6-36

AE185SMM6-36

AE190SMM6-36

AE195SMM6-36

Nominal Max. Power	P <sub>max</sub> (Wp)	180	185	190	195
Maximum power voltage	V <sub>mp</sub> (V)	20.18	20.59	21.01	21.41
Maximum power current	I <sub>mp</sub> (A)	8.92	8.98	9.04	9.11
Open-circuit voltage	V <sub>oc</sub> (V)	23.64	23.85	24.06	24.27
Short-circuit current	I <sub>sc</sub> (A)	9.59	9.65	9.73	9.79
Module efficiency	(%)	17.77	18.26	18.76	19.25
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99			
Maximum system voltage DC	(V)	1000			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

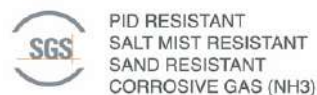
## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	36 (4 × 9)
Dimensions	1512 × 670 × 35 mm
Weight	11.5 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

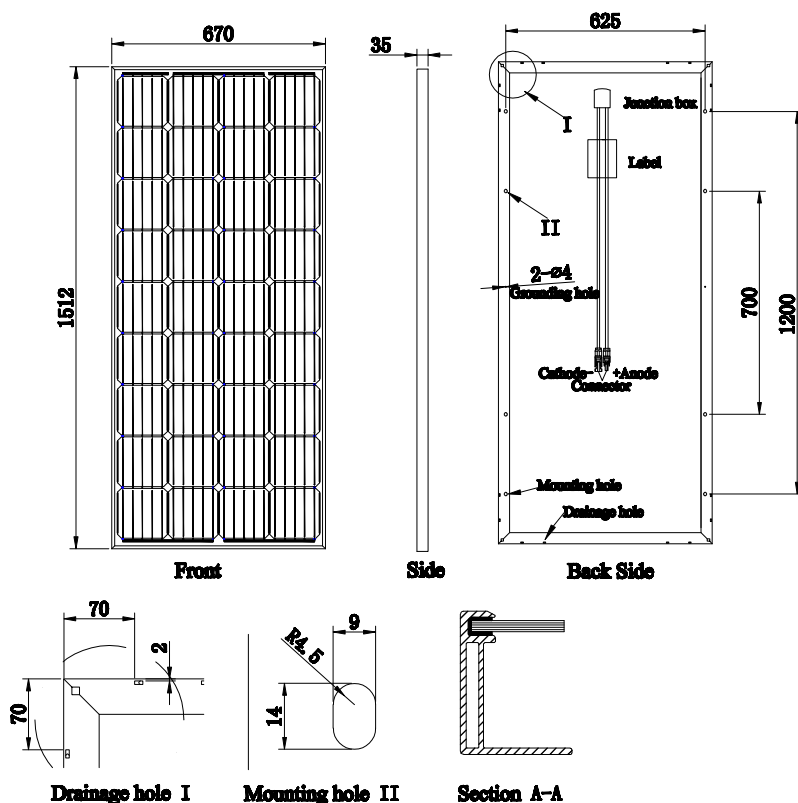
Packing configuration	90 pcs / double pallet
Loading Capacity	1350 pcs / 40HQ
Size / pallet (mm)	1540 × 1135 × 2370
Weight	1170 kg / pallet

## CERTIFICATES



FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

## DIMENSIONS



AES-DSH2019 V.002

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Inspiring green-energy since 2003

## PERC Technology

# AE SMART HOT-SPOT FREE MONOCRYSTALLINE PV MODULES AE SMM6-60 Series 305W-320W

tested by  **Fraunhofer**  
CSP

60

CELLS



SHADING  
RESISTANT



HOT SPOT  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### TEMPERATURE

Hot spot temperature lower than 85°C  
The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.

### SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.

### GERMAN QUALITY

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### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

### RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

### HIGH RETURNS

This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

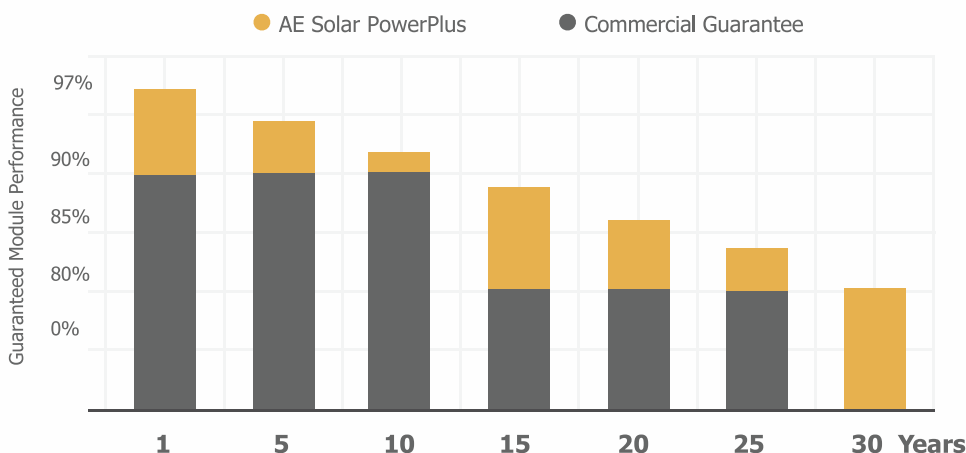
### PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

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## OUR PERFORMANCE GUARANTEE



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert



# TECHNICAL DATA

AE SMM6-60 Series 305W-320W

## SPECIFICATIONS

		AE305SMM6-60	AE310SMM6-60	AE315SMM6-60	AE320SMM6-60
Nominal Max. Power	P <sub>max</sub> (Wp)	305	310	315	320
Maximum power voltage	V <sub>mp</sub> (V)	34.01	34.42	34.84	35.19
Maximum power current	I <sub>mp</sub> (A)	8.97	9.01	9.04	9.11
Open-circuit voltage	V <sub>oc</sub> (V)	39.56	39.77	39.98	40.21
Short-circuit current	I <sub>sc</sub> (A)	9.66	9.71	9.77	9.83
Module efficiency	(%)	18.37	18.67	18.97	19.27
Power tolerance	P <sub>max</sub> (Wp)	0 / + 5			
Maximum system voltage DC	(V)	1000			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1674 x 992 x 35mm
Weight	18 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1710 x 1135 x 2325
Weight	1210 kg / pallet

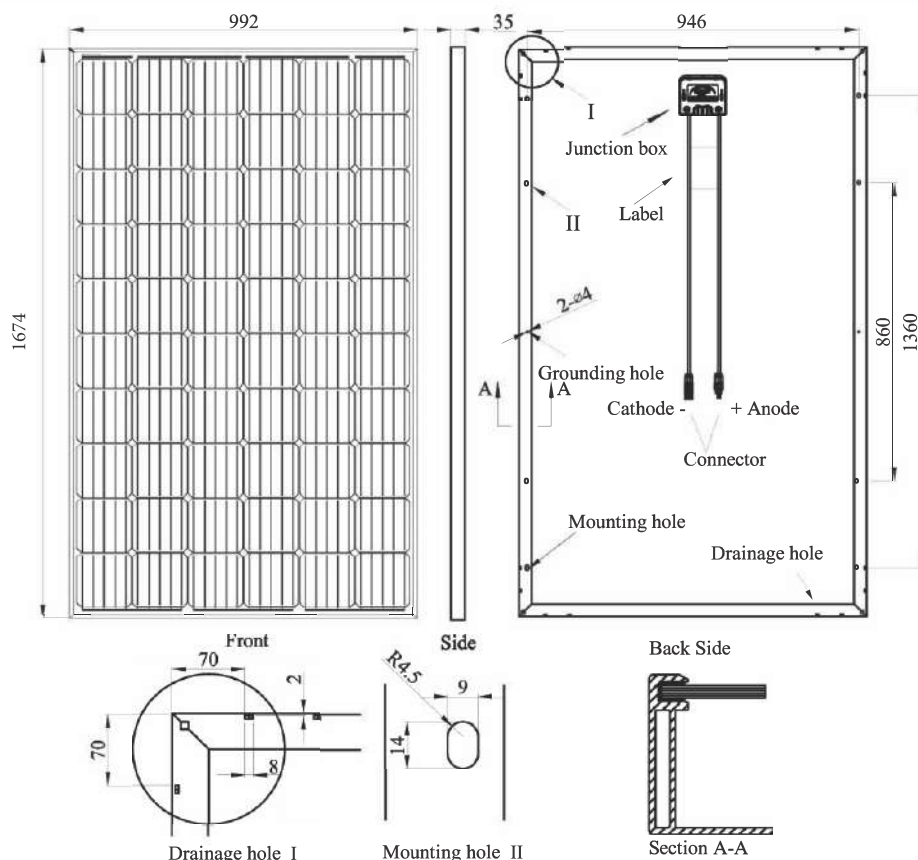
## CERTIFICATES



FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

AES-DSH2019 V.002  
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## DIMENSIONS



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Inspiring green-energy since 2003

## PERC Technology

### AE SMART HOT-SPOT FREE MONOCRYSTALLINE PV MODULES

### AE SMM6-72 Series 370W-385W

tested by  **Fraunhofer**  
CSP

72

CELLS



SHADING  
RESISTANT



HOT SPOT  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH



#### TEMPERATURE

Hot spot temperature lower than 85°C

The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



#### SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.



#### GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



#### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



#### RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.



#### HIGH RETURNS

This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.



#### PLUS-SORTING

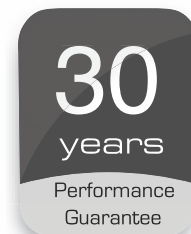
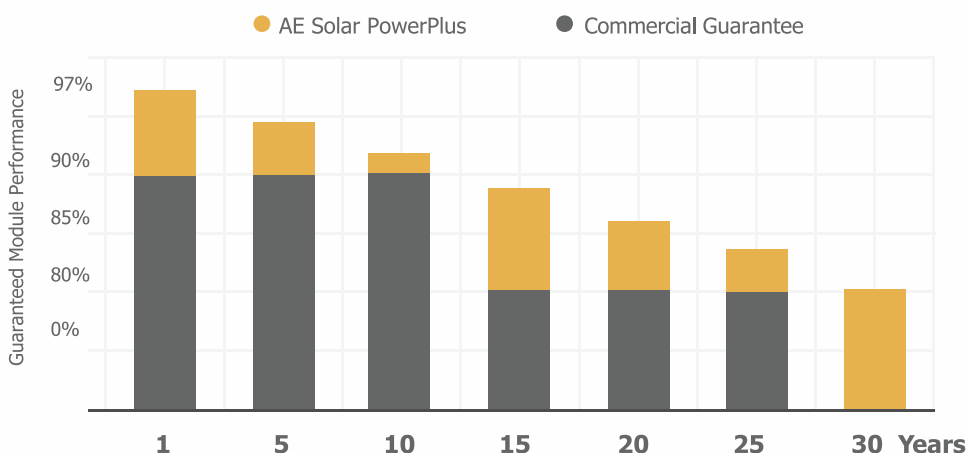
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



#### CERTIFICATES

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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE SMM6-72 Series 370W-385W

### SPECIFICATIONS

		AE370SMM6-72	AE375SMM6-72	AE380SMM6-72	AE385SMM6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	370	375	380	385
Maximum power voltage	V <sub>mp</sub> (V)	39.63	39.66	39.71	39.73
Maximum power current	I <sub>mp</sub> (A)	9.34	9.46	9.57	9.69
Open-circuit voltage	V <sub>oc</sub> (V)	47.48	47.53	47.59	47.81
Short-circuit current	I <sub>sc</sub> (A)	9.69	9.75	9.82	9.95
Module efficiency	(%)	18.65	18.90	19.15	19.41
Power tolerance	P <sub>max</sub> (Wp)	0 / + 5			
Maximum system voltage DC	(V)	1000			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

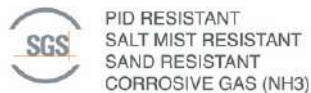
### MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 x 12)
Dimensions	2000 x 992 x 40mm
Weight	22 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	616 pcs / 40HQ
Size / pallet (mm)	2040 x 1120 x 2335
Weight	1360 kg / pallet

### CERTIFICATES

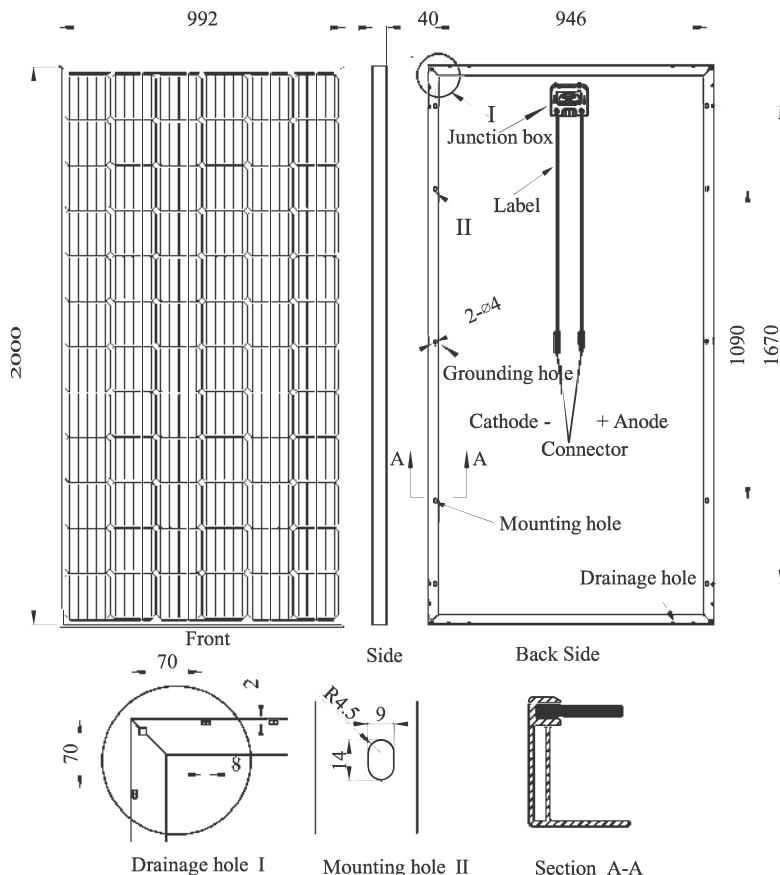


FOR INNOVATIVE  
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Inspiring green-energy since 2003

## AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE SMP6-36 Series 160W-175W

tested by  **Fraunhofer**  
CSP

36

CELLS



SHADING  
RESISTANT



HOT SPOT  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### TEMPERATURE

Hot spot temperature lower than 85°C

The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



### RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.



### SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.



### HIGH RETURNS

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### PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



### PERFORMANCE GUARANTEE

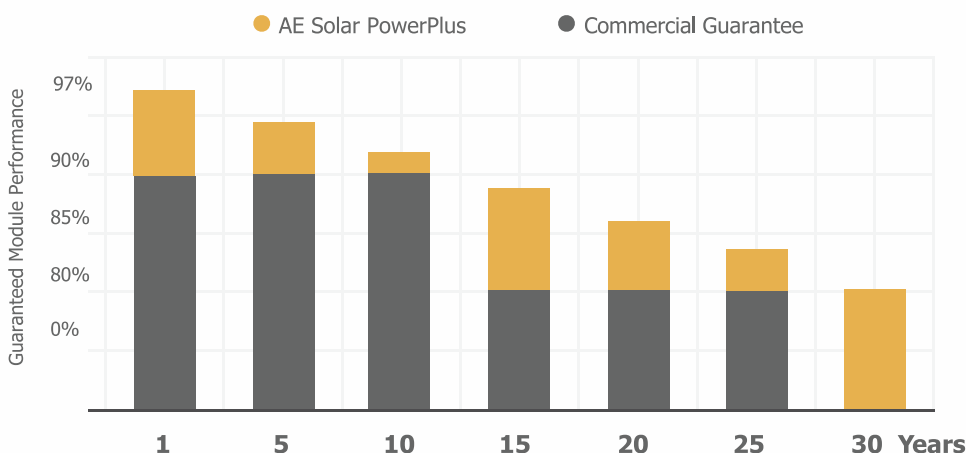
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## OUR PERFORMANCE GUARANTEE



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE SMP6-36 Series 160W-175W

## SPECIFICATIONS

AE160SMM6-36

AE165SMM6-36

AE170SMM6-36

AE175SMM6-36

Nominal Max. Power	P <sub>max</sub> (Wp)	160	165	170	175
Maximum power voltage	V <sub>mp</sub> (V)	18.32	18.73	19.15	19.56
Maximum power current	I <sub>mp</sub> (A)	8.73	8.81	8.88	8.95
Open-circuit voltage	V <sub>oc</sub> (V)	22.90	23.10	23.31	23.52
Short-circuit current	I <sub>sc</sub> (A)	9.31	9.35	9.42	9.48
Module efficiency	(%)	16.14	16.64	17.14	17.65
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99			
Maximum system voltage DC	(V)	1000			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

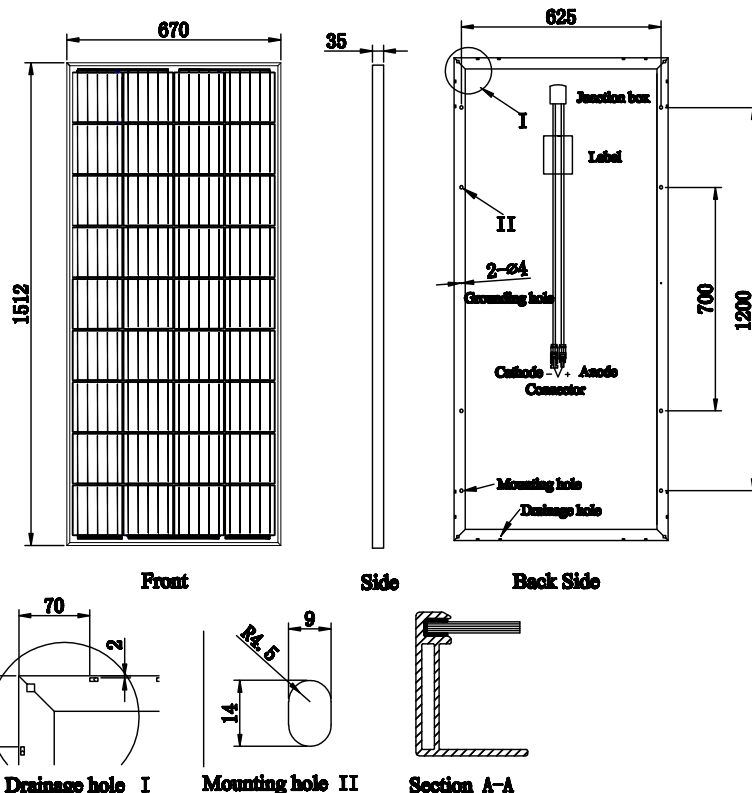
## MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	36 (4 x 9)
Dimensions	1512 x 670 x 35 mm
Weight	11.5 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	90 pcs / double pallet
Loading Capacity	1350 pcs / 40HQ
Size / pallet (mm)	1540 x 1135 x 2370
Weight	1170 kg / pallet

## DIMENSIONS



## CERTIFICATES



FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

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Inspiring green-energy since 2003

## AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE SMP6-60 Series 270W-290W

tested by **Fraunhofer**  
CSP

**60**

**CELLS**



**SHADING  
RESISTANT**



**HOT SPOT  
RESISTANT**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**



**SAND  
RESISTANT**



**AMMONIA  
RESISTANT**



**HIGHLY STABLE  
AND TOUGH**

### TEMPERATURE

Hot spot temperature lower than 85°C

The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



### RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.



### SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.



### HIGH RETURNS

This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.



### GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



### PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



### PERFORMANCE GUARANTEE

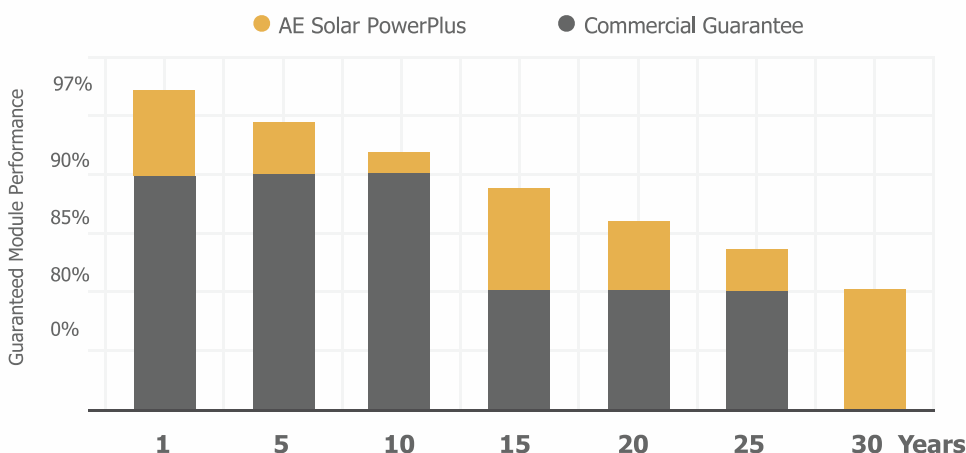
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



### CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



**30**  
years

Performance  
Guarantee

**12**  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert



# TECHNICAL DATA

## AE SMP6-60 Series 270W-290W

### SPECIFICATIONS

AE270SMP6-60 AE275SMP6-60 AE280SMP6-60 AE285SMP6-60 AE290SMP6-60

Nominal Max. Power	P <sub>max</sub> (Wp)	270	275	280	285	290
Maximum power voltage	V <sub>mp</sub> (V)	30.82	31.24	31.65	32.07	32.48
Maximum power current	I <sub>mp</sub> (A)	8.76	8.80	8.85	8.89	8.93
Open-circuit voltage	V <sub>oc</sub> (V)	38.31	38.52	38.72	38.93	39.14
Short-circuit current	I <sub>sc</sub> (A)	9.31	9.35	9.38	9.44	9.47
Module efficiency	(%)	16.26	16.56	16.86	17.16	17.46
Power tolerance	P <sub>max</sub> (Wp)	0 / + 5				
Maximum system voltage DC	(V)	1000				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.313				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

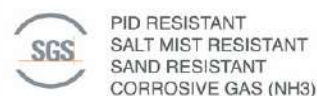
### MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1674 × 992 × 35mm
Weight	18 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanics	5400 Pa / 550 kg/m <sup>2</sup>

### PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1710 × 1135 × 2325
Weight	1210 kg / pallet

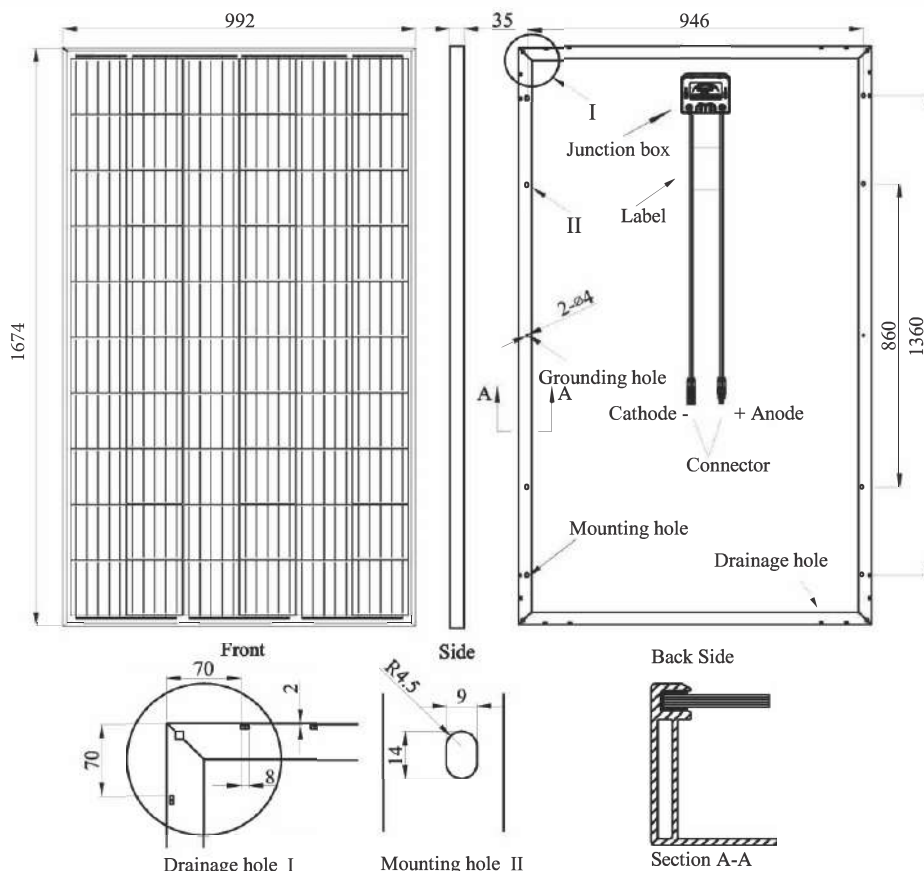
### CERTIFICATES



FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

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### DIMENSIONS



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Inspiring green-energy since 2003

## AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE SMP6-72 Series 320W-345W

tested by  **Fraunhofer**  
CSP

72

CELLS



SHADING  
RESISTANT



HOT SPOT  
RESISTANT



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### TEMPERATURE

Hot spot temperature lower than 85°C

The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



### RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.



### SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.



### HIGH RETURNS

This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.



### GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



### PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



### PERFORMANCE GUARANTEE

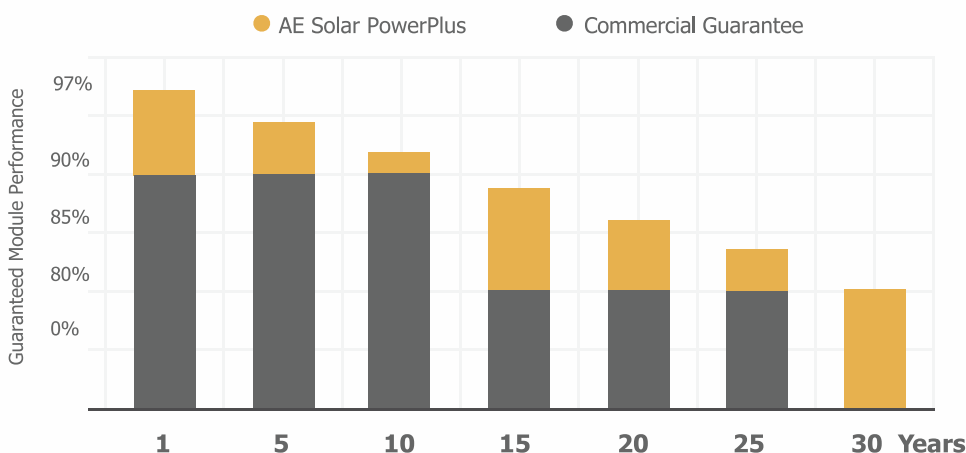
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



### CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert



# TECHNICAL DATA

## AE SMP6-72 Series 320W-345W

### SPECIFICATIONS

		AE320SM P6-72	AE325SM P6-72	AE330SM P6-72	AE335SM P6-72	AE340SM P6-72	AE345SM P6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	320	325	330	335	340	345
Maximum power voltage	V <sub>mp</sub> (V)	36.75	36.83	36.97	37.05	37.09	37.18
Maximum power current	I <sub>mp</sub> (A)	8.71	8.82	8.93	9.04	9.17	9.28
Open-circuit voltage	V <sub>oc</sub> (V)	45.72	45.83	45.89	45.93	45.97	47.26
Short-circuit current	I <sub>sc</sub> (A)	9.28	9.33	9.37	9.41	9.44	9.48
Module efficiency	(%)	16.13	16.38	16.63	16.98	17.14	17.39
Power tolerance	P <sub>max</sub> (Wp)	0 / + 5					
Maximum system voltage DC	(V)	1000					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40					
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31					
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053					
Nom. Operating cell temp.(NOCT)	(°C)	45±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 × 12)
Dimensions	2000 × 992 × 40mm
Weight	22 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	616 pcs / 40HQ
Size / pallet (mm)	2040 × 1120 × 2335
Weight	1360 kg / pallet

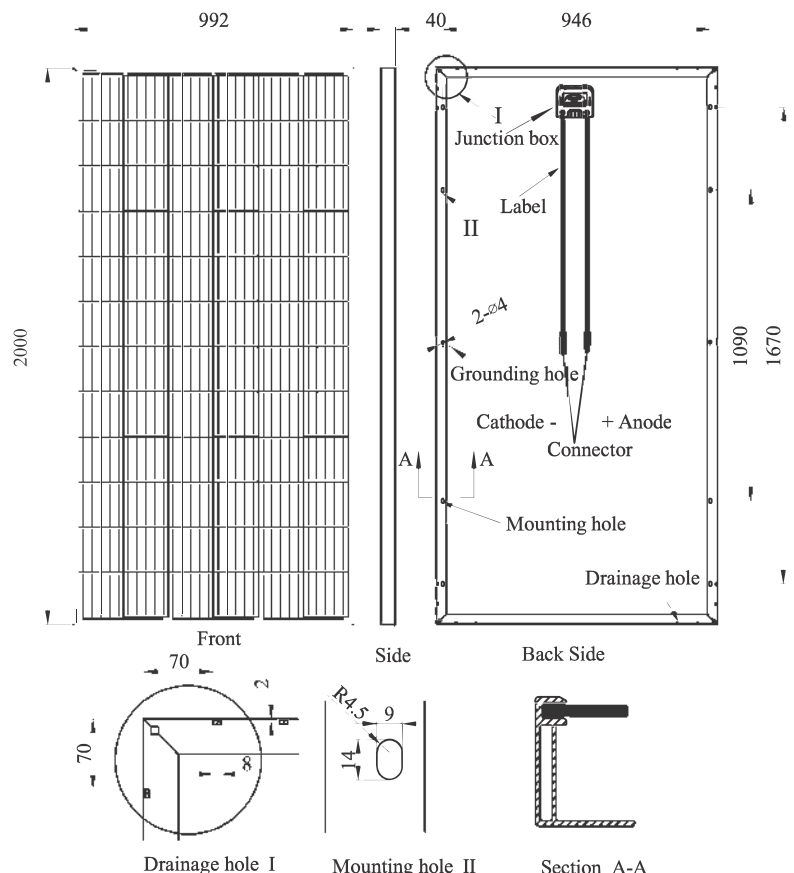
### CERTIFICATES



FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

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### DIMENSIONS



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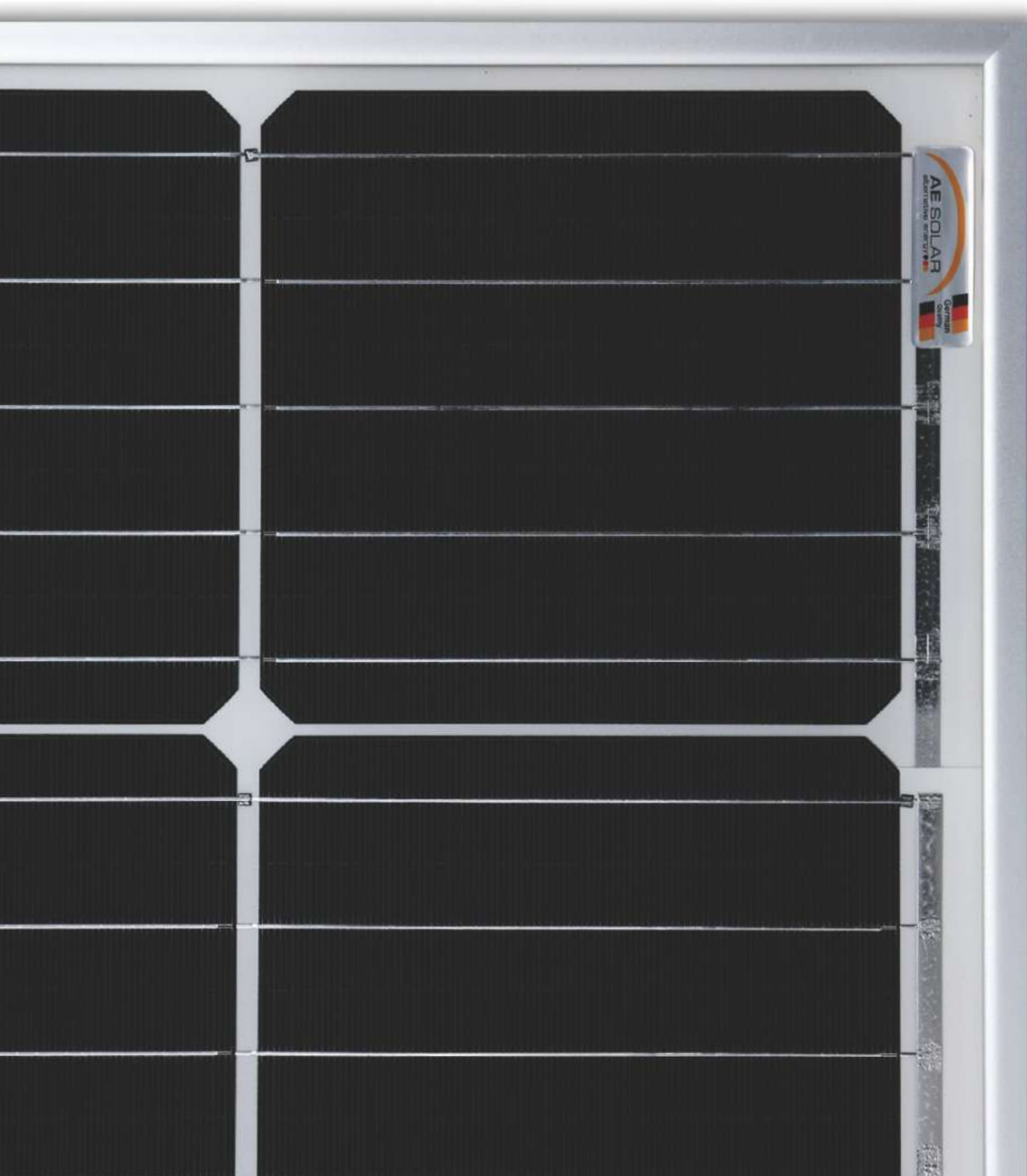
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Web: www.ae-solar.com

# Core values

## Durability ●●●

AE Solar commits to providing only the best quality for customers. Therefore, 100% testing ratio for visual inspection, EL testing, pressure testing, mechanical load testing and age testing ensure that AE Solar photovoltaic modules operate safely and smoothly for at least 30 years with the product warranty of 12 years. Hence, guaranteeing a strong and stable return on investment for investors.



# AE HDT PV MODULE WITH TRANSPARENT BIFACIAL BACKSHEET





Inspiring green-energy since 2003

## AE HDT DOUBLE GLASS MONOCRYSTALLINE PV MODULES AE M6-60 Series 305W-315W

60

CELLS



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### TEMPERATURE

The Advantage of HDT Photovoltaic module is Power-Temperature coefficient decreases by 40% than standard type of silicon solar modules. Therefore, it has much higher power output in high temperature environment.

### EFFICIENCY

HDT Photovoltaic module's conversional efficiency is increased by 10%-20% compared to standard solar modules. Moreover, reducing the cost of accessories, transportation, installation and maintenance.

### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

### HIGH RETURNS

This new technology of HDT has much lower LCOE and it provides increase of the performance ratio and much higher return of investment.

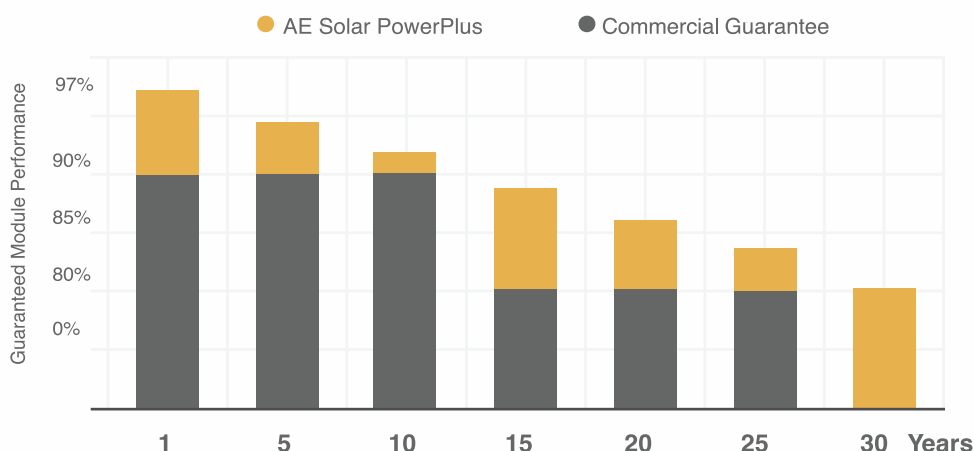
### HIGH STABILITY

Based on new technology, HDT photovoltaic modules can decrease Light Induced Degradation by 50% compared to standard Solar modules.

### CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## HDT Solar Module with transparent backsheet

### SPECIFICATION

#### AE305M6-60

#### AE310M6-60

#### AE315M6-60

Nominal Max. Power	Pmax (Wp)	305		310		315	
		Front Side	Back Side	Front Side	Back Side	Front Side	Back Side
Maximum power voltage	Vmp(V)	36.0	35.8	36.3	36.0	36.6	36.1
Maximum power current	Imp (A)	8.48	6.98	8.54	7.08	8.61	7.15
Open-circuit voltage	Voc(V)	43.6	43.3	43.8	43.5	44.0	43.7
Short-circuit current	Isc (A)	9.13	7.40	9.17	7.40	9.21	7.40
Module efficiency	(%)	18.54	15.20	18.85	15.48	19.15	15.70
Power tolerance	Pmax (Wp)	0 / + 5					
Maximum system voltage DC	V (IEC)	1500					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of Pmax	(%/°C)	-0.28					
Temp. coefficients of Voc	(%/°C)	-0.277					
Temp. coefficients of Isc	(%/°C)	0.059					
Nom. Operating cell temp.(NOCT)	(°C)	45±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

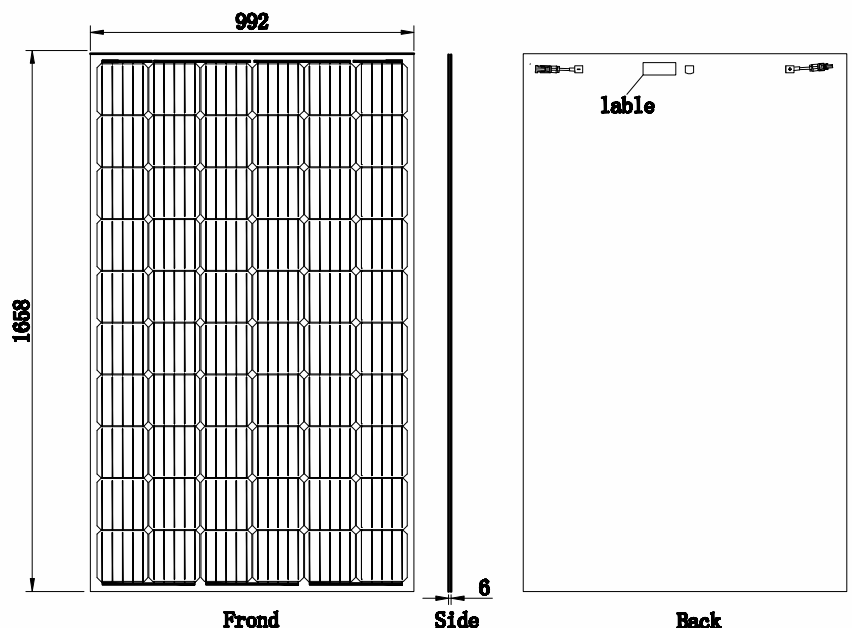
### MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline HDT
Cell Dimension	156.75mm × 156.75mm
Dimensions	1658mm × 992mm × 6mm
Weight	23 kg
Front Glass	Embossed Tempered/ 2.5mm
Encapsulant	EVA/0.6mm
Junction Box	II /3
Cable	300 mm/4mm <sup>2</sup>
Connector	Compatibility MC4/IP67
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

### PACKAGING INFORMATION

Packing configuration	68 pcs / pallet
Loading capacity	884 pcs / 40HQ
Size / pallet (mm)	1772 x 1136 x 2350
Weight	1728 kg / pallet

### DIMENSIONS



### CERTIFICATES



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## AE HDT SINGLE GLASS MONOCRYSTALLINE PV MODULES AE M6-60 Series 310W-320W

60

CELLS



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### TEMPERATURE

The Advantage of HDT Photovoltaic module is Power-Temperature coefficient decreases by 40% than standard type of silicon solar modules. Therefore, it has much higher power output in high temperature environment.

### EFFICIENCY

HDT Photovoltaic module's conversional efficiency is increased by 10%-20% compared to standard solar modules. Moreover, reducing the cost of accessories, transportation, installation and maintenance.

### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

### HIGH RETURNS

This new technology of HDT has much lower LCOE and it provides increase of the performance ratio and much higher return of investment.

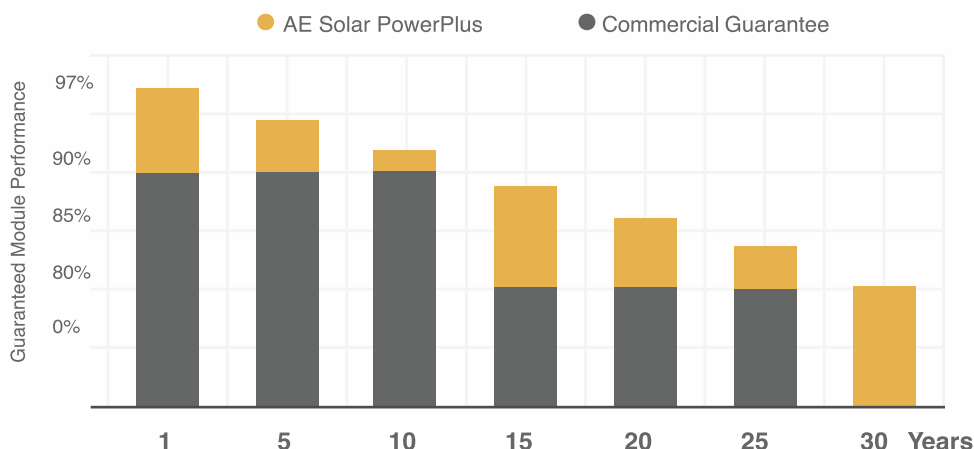
### HIGH STABILITY

Based on new technology, HDT photovoltaic modules can decrease Light Induced Degradation by 50% compared to standard Solar modules.

### CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## HDT Solar Module with transparent backsheet

### SPECIFICATION

**AE310M6-60****AE315M6-60****AE320M6-60**

Nominal Max. Power	P <sub>max</sub> (Wp)	310	315	320
		Front Side	Front Side	Front Side
Maximum power voltage	V <sub>mp</sub> (V)	35.8	36.1	36.4
Maximum power current	I <sub>mp</sub> (A)	8.66	8.73	8.8
Open-circuit voltage	V <sub>oc</sub> (V)	43.6	43.8	44
Short-circuit current	I <sub>sc</sub> (A)	9.3	9.34	9.38
Module efficiency	(%)	19.05	19.36	19.67
Power tolerance	P <sub>max</sub> (Wp)	0 / + 5		
Maximum system voltage DC	V (IEC)	1500		
Operating temperature	(°C)	-40 to +85		
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.28		
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.277		
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.059		
Nom. Operating cell temp.(NOCT)	(°C)	45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline HDT
Cell Dimension	156.75mm × 156.75mm
Dimensions	1640mm × 992mm × 40mm
Weight	19 kg
Front Glass	Embossed Tempered/ 3.2mm
Encapsulant	EVA/0.5mm
Junction Box	II /3
Cable	300 mm/4mm <sup>2</sup>
Connector	Compatibility MC4/IP67
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

### PACKAGING INFORMATION

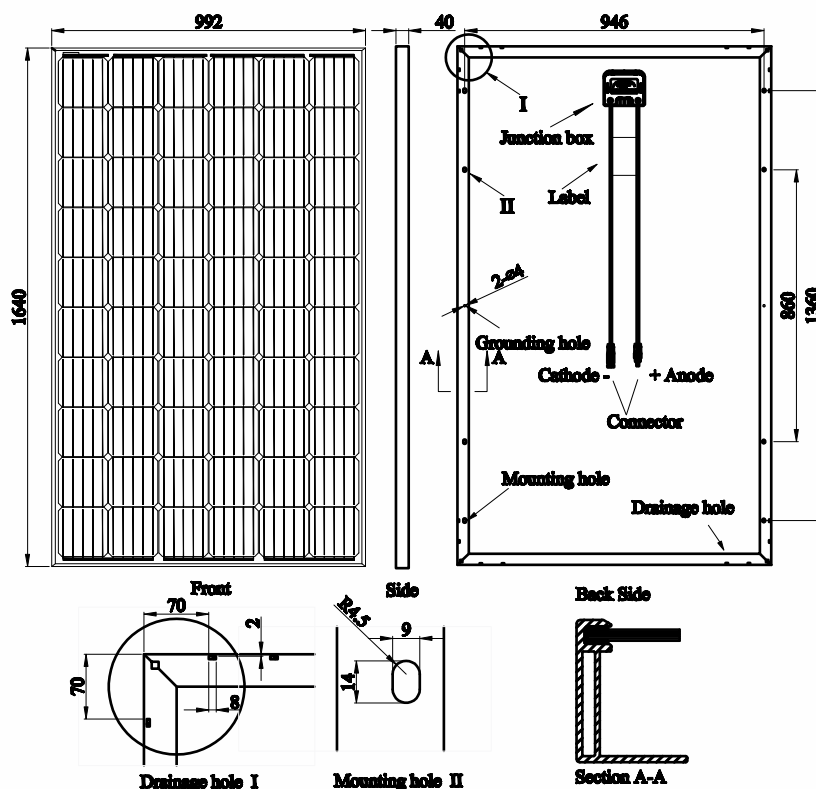
Packing configuration	52 pcs / pallet
Loading capacity	728 pcs / 40HQ
Size / pallet (mm)	1685 x 1120 x 2216
Weight	1050 kg / pallet

### CERTIFICATES



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### DIMENSIONS

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# AE SHINGLED PV MODULES

## PERC TECHNOLOGY







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## PERC TECHNOLOGY

AE SHINGLED PV MODULES

MONOCRYSTALLINE PV MODULES

AE M6-60 Series 325W-350W

60

CELLS



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH



### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



### AESTHETICALLY PLEASING

Uniform cell layout and symmetric module Design



### SYSTEM COST REDUCED

10% of Reduction in BOS and Installation cost



### COMPATIBILITY

PERC Compatible, SHJ mainstream with high efficient cell technologies



### CRACK RESISTANT

Avoids micro-cracks introduced during conventional stringing process;  
Capable of withstanding heavy loads;  
Suitable for applications in harsh Environments



### HIGH EFFICIENCY

High efficiency and class leading quality



### HIGH OUTPUT

15%+more output comparing to conventional technology



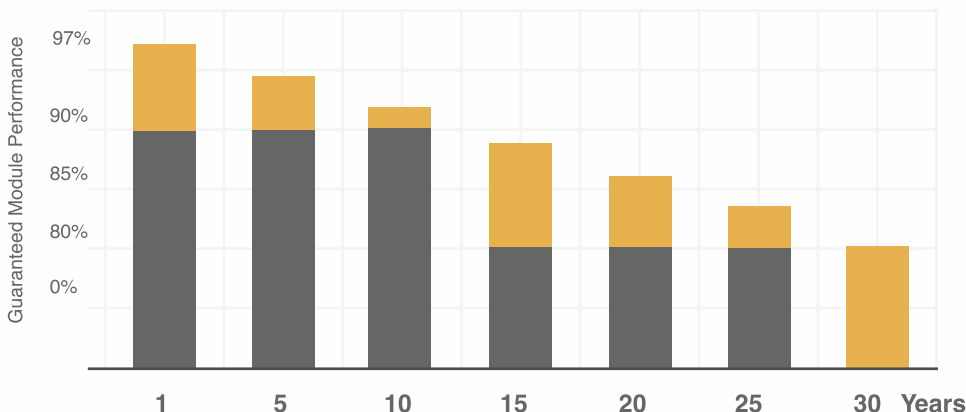
### GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

## OUR PERFORMANCE GUARANTEE

● AE Solar PowerPlus

● Commercial Guarantee



30  
years

Performance  
Guarantee

12  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## SGM6 SERIES SOLAR MODULE

### SPECIFICATIONS

SGM6-325 SGM6-330 SGM6-335 SGM6-340 SGM6-345 SGM6-350

Nominal Max. Power	Pmax (Wp)	325	330	335	340	345	350
Maximum power voltage	Vmp(V)	37.1	37.2	37.3	37.4	37.5	37.6
Maximum power current	Imp (A)	8.76	8.87	8.98	9.09	9.2	9.31
Open-circuit voltage	Voc(V)	45.1	45.1	45.2	45.2	45.3	45.4
Short-circuit current	Isc (A)	9.42	9.45	9.49	9.51	9.55	9.6
Module efficiency	(%)	18.8	19.0	19.3	19.6	19.9	20.2
Power tolerance	Pmax (Wp)	0 / + 4.99					
Maximum system voltage DC	VDC(IEC)	1500					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of Pmax	(%/°C)	-0.34					
Temp. coefficients of Voc	(%/°C)	-0.27					
Temp. coefficients of Isc	(%/°C)	0.04					
Nom. Operating cell temp.(NOCT)	(°C)	42.3±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

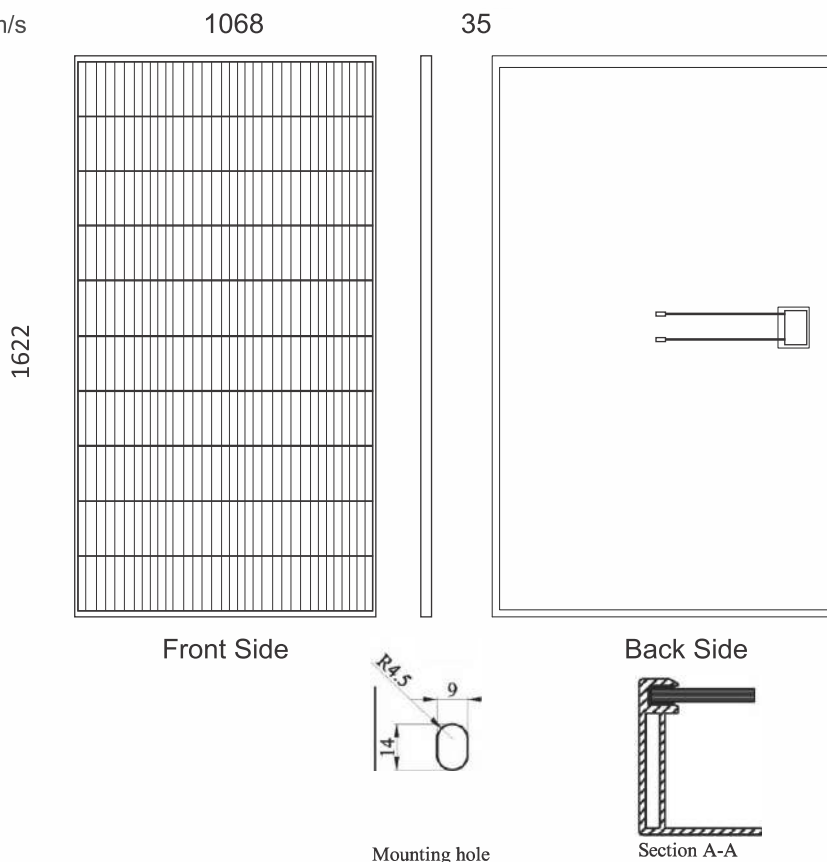
### MATERIAL CHARACTERISTICS

Cell type	Perc Mono-crystalline silicon solar cells
Dimensions	1622x1068x35 mm
Weight	19.8 kg
Junction box	15A; TUV&UL; IP67
Output cable	1000mm/4mm <sup>2</sup>
Connector type	compatibility MC 4
Hail resistance	Diameter of 1m. Ø 25 mm, at 23 m/s
Mechanical load	5400 Pa

### PACKAGING INFORMATION

Packing configuration	60 pcs / double pallet
Loading Capacity	840 pcs / 40HQ
Size / pallet (mm)	1660 x 1135 x 2380
Weight	1268 kg / double pallet

### DIMENSIONS



### CERTIFICATES



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Inspiring green-energy since 2003

## PERC TECHNOLOGY

### AE SHINGLED PV MODULES

### MONOCRYSTALLINE PV MODULES

### AE SGM6-72 Series 395W-420W

**72**  
CELLS

**PID**  
RESISTANT

**SALT CORROSION**  
RESISTANT

**SAND**  
RESISTANT

**NH<sub>3</sub>**  
RESISTANT

**HIGHLY STABLE**  
AND TOUGH

#### PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

#### CRACK RESISTANT

Avoids micro-cracks introduced during conventional stringing process;  
Capable of withstanding heavy loads;  
Suitable for applications in harsh Environments

#### AESTHETICALLY PLEASING

Uniform cell layout and symmetric module Design

#### HIGH EFFICIENCY

High efficiency and class leading quality

#### SYSTEM COST REDUCED

10% of Reduction in BOS and Installation cost

#### HIGH OUTPUT

15%+more output comparing to conventional technology

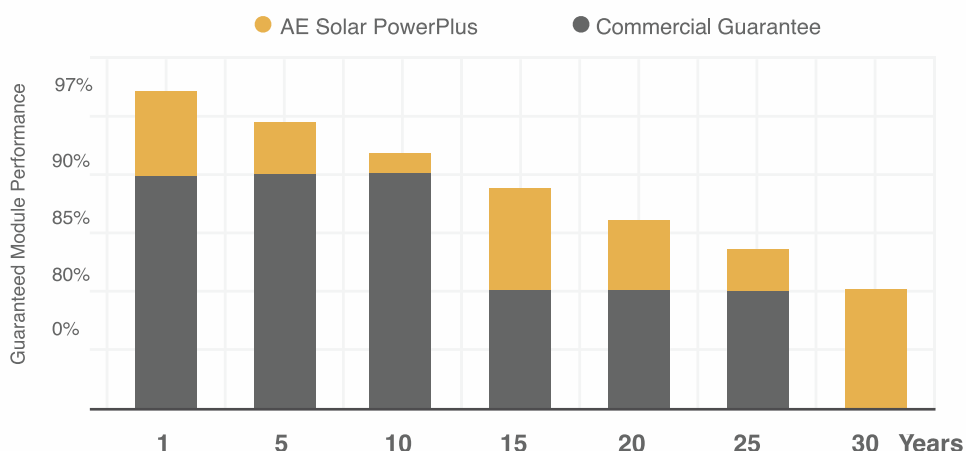
#### COMPATIBILITY

PERC Compatible, SHJ mainstream with high efficient cell technologies

#### GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

## OUR PERFORMANCE GUARANTEE



**30**  
years

Performance  
Guarantee

**12**  
years

Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## SGM6 SERIES SOLAR MODULE

### SPECIFICATIONS

		SGM6-395	SGM6-400	SGM6-405	SGM6-410	SGM6-415	SGM6-420
Nominal Max. Power	P <sub>max</sub> (Wp)	395	400	405	410	415	420
Maximum power voltage	V <sub>mp</sub> (V)	37.2	37.3	37.4	37.5	37.6	37.7
Maximum power current	I <sub>mp</sub> (A)	10.62	10.72	10.83	10.93	11.04	11.53
Open-circuit voltage	V <sub>oc</sub> (V)	45.2	45.2	45.3	45.3	45.4	45.5
Short-circuit current	I <sub>sc</sub> (A)	11.31	11.35	11.39	11.43	11.47	11.53
Module efficiency	(%)	19	19.3	19.5	19.7	20.0	20.2
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99					
Maximum system voltage DC	V <sub>DC</sub> (IEC)	1500					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.34					
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.27					
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.04					
Nom. Operating cell temp.(NOCT)	(°C)	42.3±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

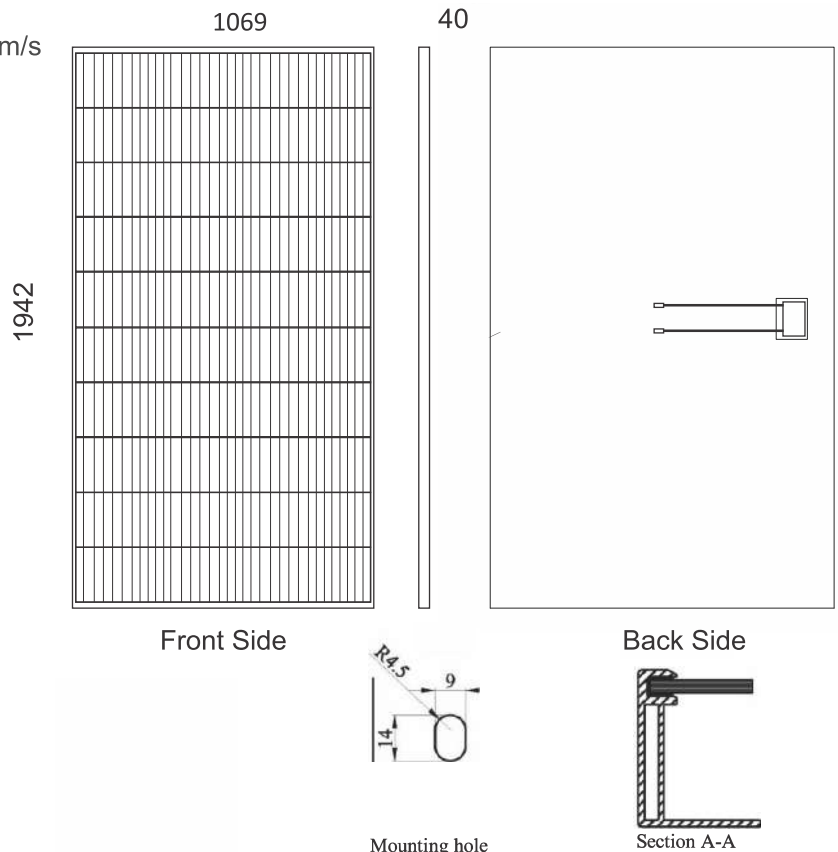
### MATERIAL CHARACTERISTICS

Cell type	Perc Mono-crystalline silicon solar cells
Dimensions	1942 x 1069 x 40 mm
Weight	24.0 kg
Junction box	15A; TUV&UL;
Output cable	1200mm/4mm <sup>2</sup>
Connector type	compatibility MC 4
Hail resistance	Diameter of 1m. Ø 25 mm, at 23 m/s
Mechanical load	5400 Pa

### PACKAGING INFORMATION

Packing configuration	52 pcs / double pallet
Loading Capacity	624 pcs / 40HQ
Size / pallet (mm)	1980 x 1120 x 2380
Weight	1358 kg / double pallet

### DIMENSIONS



### CERTIFICATES



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**TOTAL  
ANNUAL  
CAPACITY**

---

**1  
GW**



Deutsche  
Qualität  
Garantiert

# AE LARGE CELL PV MODULES







Inspiring green-energy since 2003

## PERC Technology

# AE LARGE CELL MONOCRYSTALLINE PV MODULES AE M6-60 Series 305W-335W

**60**  
CELLS



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**



**SAND  
RESISTANT**



**AMMONIA  
RESISTANT**



**HIGHLY STABLE  
AND TOUGH**



### GERMAN QUALITY

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### PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



### PERFORMANCE GUARANTEE

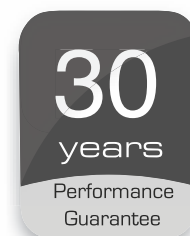
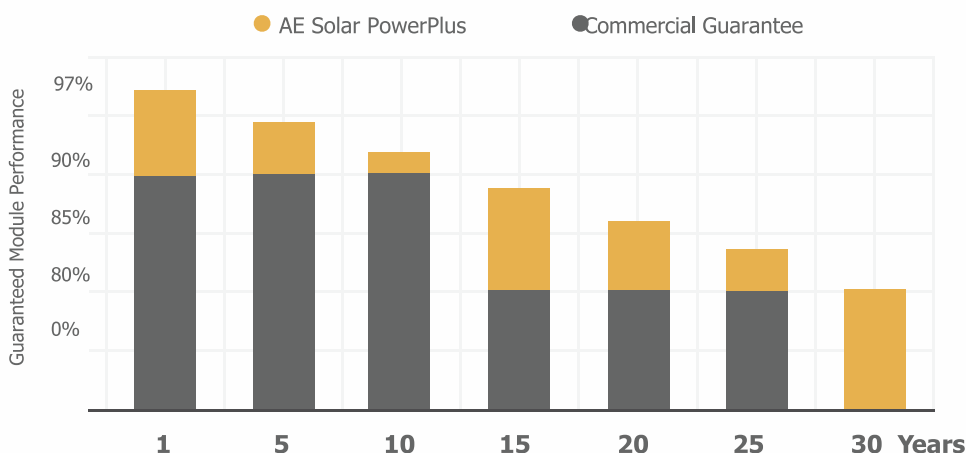
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



### CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE M6-60 Series 305W-335W

## SPECIFICATIONS

AE305M6-60 AE310M6-60 AE315M6-60 AE320M6-60 AE325M6-60 AE330M6-60 AE335M6-60

Nominal Max. Power	P <sub>max</sub> (Wp)	305	310	315	320	325	330	335
Maximum power voltage	V <sub>mp</sub> (V)	32.80	33.00	33.20	33.40	33.61	33.81	34.02
Maximum power current	I <sub>mp</sub> (A)	9.30	9.40	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	V <sub>oc</sub> (V)	40.31	40.50	40.70	40.90	41.10	41.31	41.49
Short-circuit current	I <sub>sc</sub> (A)	9.83	9.92	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.28	18.58	18.88	19.18	19.48	19.78	20.08
Power tolerance	P <sub>max</sub> (Wp)	0 / + 5						
Maximum system voltage DC	(V)	1000						
Maximum series fuse rating	(A)	15						
Operating temperature	(°C)	-40 to +85						
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.37						
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.28						
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.048						
Nom. Operating cell temp.(NOCT)	(°C)	45±2						

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 158.75 x 158.75mm
No. of cells	60 (6 x 10)
Dimensions	1665 x 1002 x 35mm
Weight	19.0 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

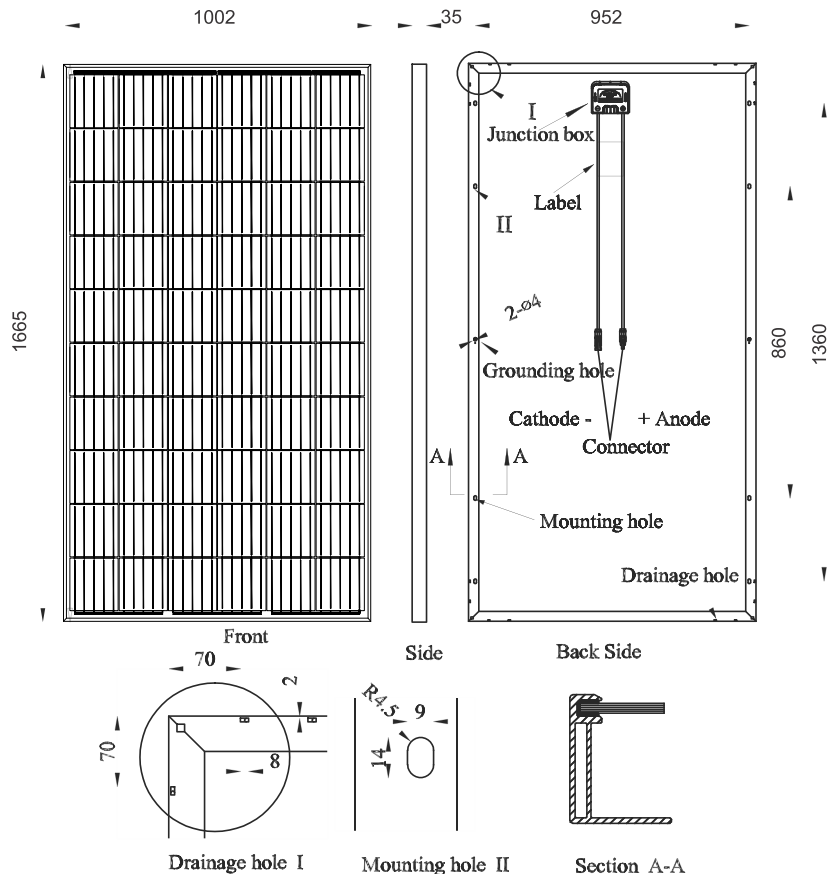
## PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1695 x 1135 x 2410
Weight	1315 kg / double pallet

## CERTIFICATES



## DIMENSIONS



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Inspiring green-energy since 2003

## PERC Technology

# AE LARGE CELL MONOCRYSTALLINE PV MODULES AE M6-72 Series 370W-400W

**72**  
CELLS



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**



**SAND  
RESISTANT**



**AMMONIA  
RESISTANT**



**HIGHLY STABLE  
AND TOUGH**

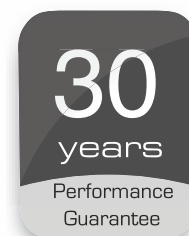
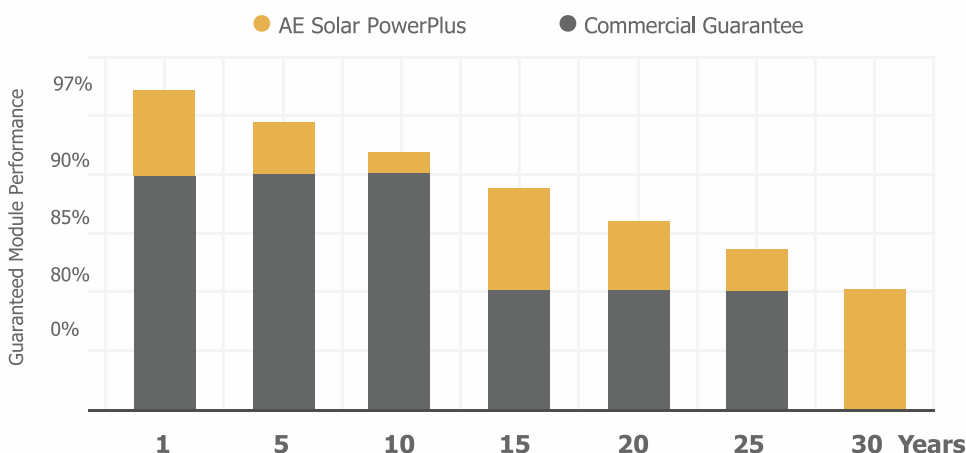
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**+ PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

**⌚ PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

**📄 CERTIFICATES**  
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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE M6-72 Series 370W-400W

### SPECIFICATIONS

AE370M6-72 AE375M6-72 AE380M6-72 AE385M6-72 AE390M6-72 AE395M6-72 AE400M6-72

Nominal Max. Power	Pmax (Wp)	370	375	380	385	390	395	400
Maximum power voltage	Vmp(V)	39.90	40.20	40.50	40.80	41.10	41.40	41.71
Maximum power current	Imp (A)	9.28	9.33	9.39	9.44	9.49	9.54	9.59
Open-circuit voltage	Voc(V)	48.51	48.72	48.90	49.10	49.30	49.48	49.69
Short-circuit current	Isc (A)	9.61	9.68	9.75	9.92	10.12	10.50	10.59
Module efficiency	(%)	18.66	18.91	19.16	19.42	19.67	19.92	20.17
Power tolerance	Pmax (Wp)	0 / + 5						
Maximum system voltage DC	(V)	1000						
Operating temperature	(°C)	15						
Temp. coefficients of Pmax	(%/°C)	-40 to +85						
Temp. coefficients of Voc	(%/°C)	-0.37						
Temp. coefficients of Isc	(%/°C)	-0.28						
Nom. Operating cell temp.(NOCT)	(°C)	0.048						
		45±2						

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 158.75 x 158.75mm
No. of cells	72 (6 x 12)
Dimensions	1979 x 1002 x 40mm
Weight	22.5 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

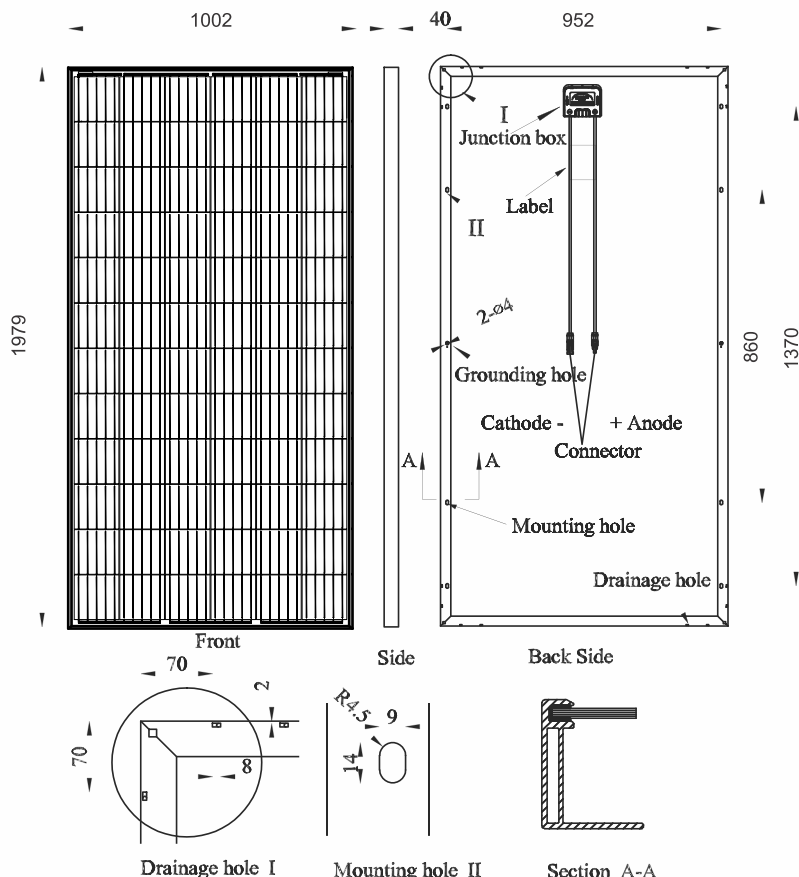
### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	616 pcs / 40HQ
Size / pallet (mm)	2015 x 1120 x 2335
Weight	1380 kg / double pallet

### CERTIFICATES



### DIMENSIONS



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Inspiring green energy since 2003

AE SOLAR PRODUCES THE THINNEST DOUBLE  
GLASS PV MODULES IN THE WORLD



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Qualität  
Garantiert

## AE DOUBLE-GLASS PV MODULES







Inspiring green-energy since 2003

## AE DOUBLE-GLASS MONOCRYSTALLINE PV MODULES AE M6-60 Series 290W-320W THE LIGHTWEIGHT TECHNOLOGY

60

CELLS



MICRO-CRACK  
FREE



FIRE CLASS  
A



PID  
RESISTANT



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

### ✓ GERMAN QUALITY

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### \$ HIGH RETURNS

This technology increases the performance ratio, eliminates the potential hazards and material degradation, ensures better safety, long life and high investment returns.

### 🕒 PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

### + PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



### SAFETY

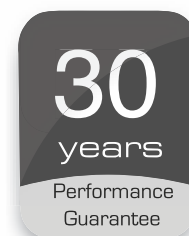
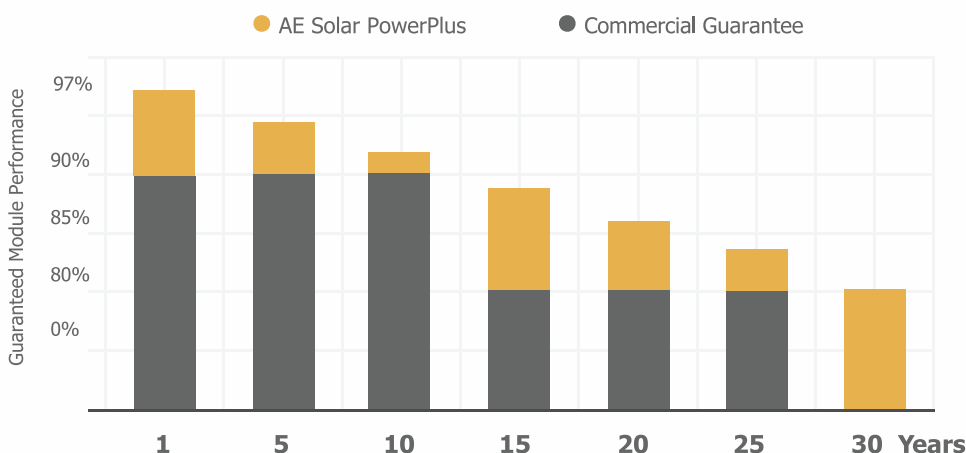
Back sheet is replaced by 2 mm tempered glass, ensuring additional safety, no back sheet degradation and surface for heat loss. Lower temperature offers better and more stable output during high temperature conditions.



### CERTIFICATES

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## OUR PERFORMANCE GUARANTEE



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Qualität  
Garantiert

# TECHNICAL DATA

AE M6-60 Series 290W-320W

## SPECIFICATIONS

AE290M6-60 AE295M6-60 AE300M6-60 AE305M6-60 AE310M6-60 AE315M6-60 AE320M6-60

Nominal Max. Power	P <sub>max</sub> (Wp)	290	295	300	305	310	315	320
Maximum power voltage	V <sub>mp</sub> (V)	32.69	33.03	33.52	34.00	34.48	34.96	35.44
Maximum power current	I <sub>mp</sub> (A)	8.87	8.93	8.95	8.97	8.99	9.01	9.03
Open-circuit voltage	V <sub>oc</sub> (V)	38.65	39.03	39.41	39.78	40.15	40.51	40.86
Short-circuit current	I <sub>sc</sub> (A)	9.62	9.69	9.76	9.83	9.9	9.97	10.04
Module efficiency	(%)	17.63	17.94	18.24	18.54	18.85	19.15	19.46
Power tolerance	P <sub>max</sub> (Wp)	0 / +4.99						
Maximum system voltage DC	(V)	1500						
Maximum series fuse rating	(A)	15						
Operating temperature	(°C)	-40 to +85						
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.436						
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.325						
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.054						
Nom. Operating cell temp.(NOCT)	(°C)	45±2						

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

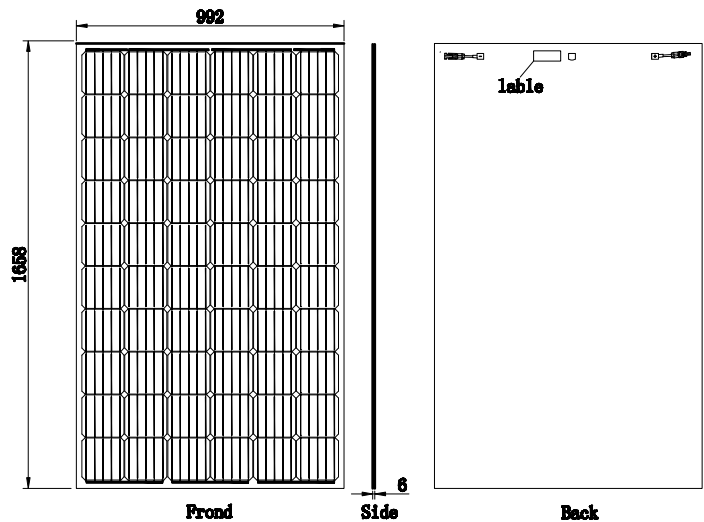
## MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline
Cell Dimension	156.75mm × 156.75mm
Dimensions	1658mm x 992mm x 6mm (J-box not included)
Weight	23kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	858 pcs / 40HQ
Size / pallet (mm)	1710 x 1140 x 2264
Weight	1610 kg

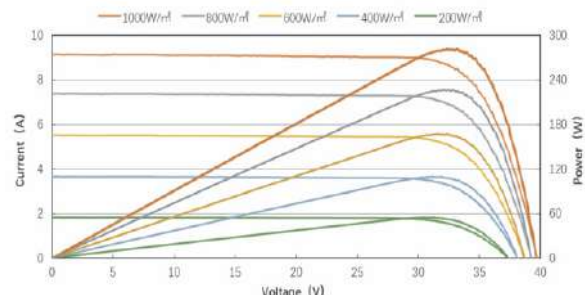
## DIMENSIONS



## CERTIFICATES



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Excellent performance at 200W/m<sup>2</sup> (AM 1.5, 25 °C): the conversion efficiency could be 96.6% of STC.

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## AE DOUBLE-GLASS MONOCRYSTALLINE PV MODULES AE M6-72 Series 350W-365W THE LIGHTWEIGHT TECHNOLOGY

72

CELLS



MICRO-CRACK  
FREE



FIRE CLASS  
A



PID



SALT CORROSION  
RESISTANT



SAND  
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AMMONIA  
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HIGHLY STABLE  
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This technology increases the performance ratio, eliminates the potential hazards and material degradation, ensures better safety, long life and high investment returns.

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### SAFETY

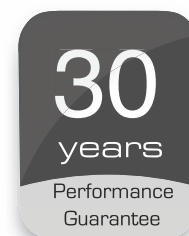
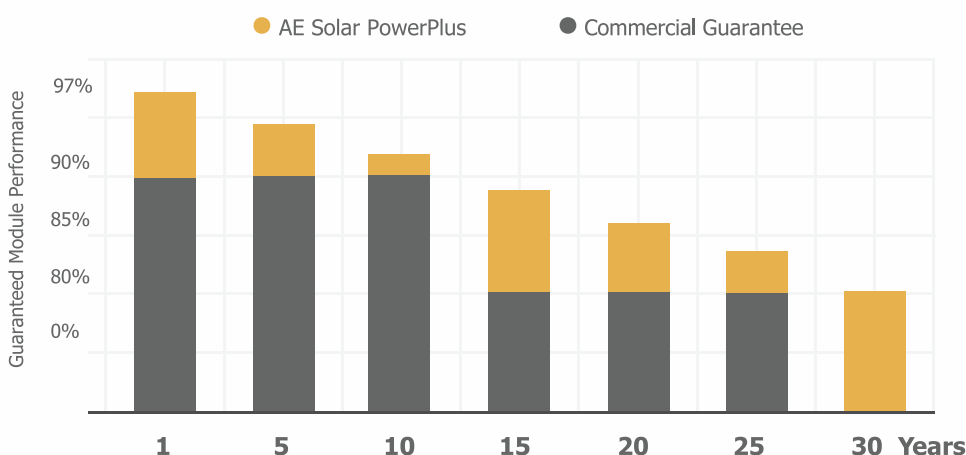
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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE M6-72 Series 350W-365W

## SPECIFICATIONS

AE350DGM6-72 AE355DGM6-72 AE360DGM6-72 AE365DGM6-72

Nominal Max. Power	P <sub>max</sub> (Wp)	350	355	360	365
Maximum power voltage	V <sub>mp</sub> (V)	39.37	39.66	39.96	40.24
Maximum power current	I <sub>mp</sub> (A)	8.89	8.95	9.01	9.07
Open-circuit voltage	V <sub>oc</sub> (V)	46.50	46.82	47.14	47.46
Short-circuit current	I <sub>sc</sub> (A)	9.65	9.72	9.79	9.86
Module efficiency	(%)	17.77	18.03	18.28	18.54
Power tolerance	P <sub>max</sub> (Wp)	0 / +4.99			
Maximum system voltage DC	(V)	1500			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.436			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.325			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.054			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

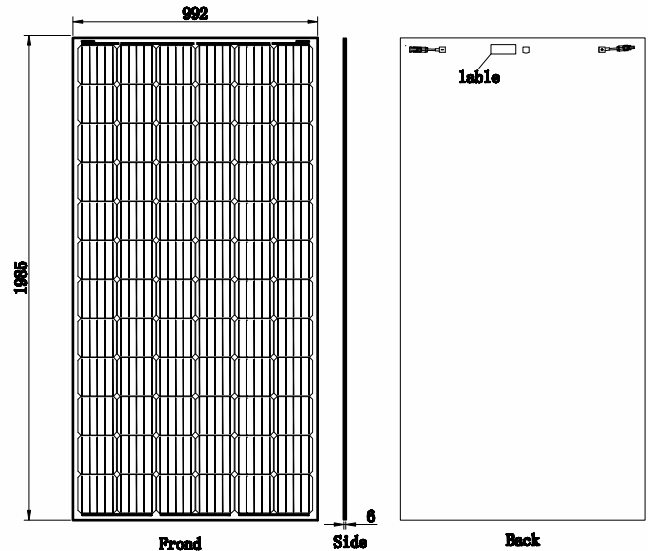
## MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline
Cell Dimension	156.75mm × 156.75mm
Dimensions	1985mm x 992mm x 6mm (J-box not included)
Weight	28kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

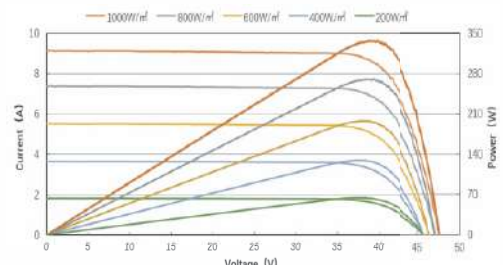
## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	726 pcs / 40HQ
Size / pallet (mm)	2035 x 1140 x 2264
Weight	1960 kg

## DIMENSIONS



## CERTIFICATES



Excellent performance at 200W/m<sup>2</sup>(AM 1.5, 25 °C): the conversion efficiency could be 96.5% of STC

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## PERC Technology

### AE DOUBLE-GLASS MONOCRYSTALLINE PV MODULES AE M6-72 Series 370W-385W THE LIGHTWEIGHT TECHNOLOGY

72

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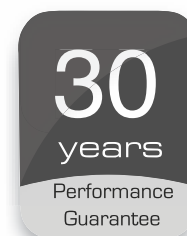
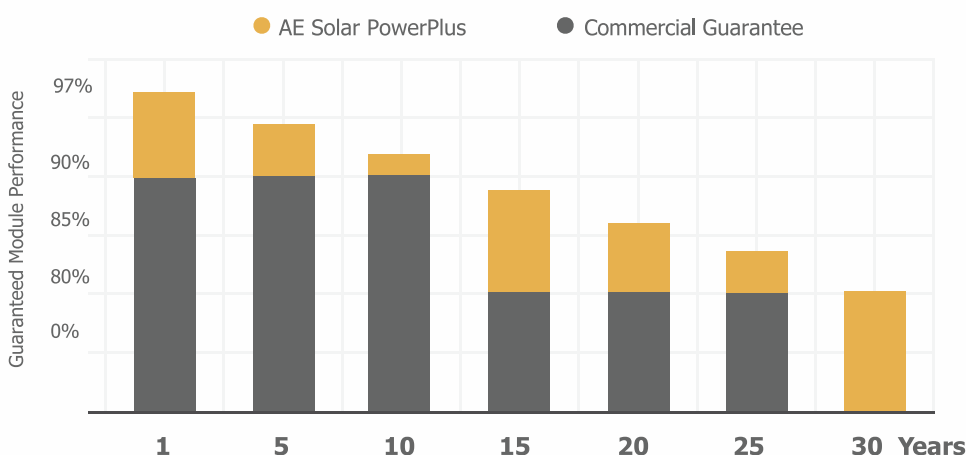
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#### CERTIFICATES

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### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## SPECIFICATIONS

AE M6-72 Series 370W-385W

AE370DGM6-72

AE375DGM6-72

AE380DGM6-72

AE385DGM6-72

Nominal Max. Power	Pmax (Wp)	370	375	380	385
Maximum power voltage	Vmp(V)	40.53	40.81	41.08	41.35
Maximum power current	Imp (A)	9.13	9.19	9.25	9.31
Open-circuit voltage	Voc(V)	47.77	48.08	48.38	48.68
Short-circuit current	Isc (A)	9.93	10	10.07	10.14
Module efficiency	(%)	18.79	19.04	19.30	19.55
Power tolerance	Pmax (Wp)	0 / +4.99			
Maximum system voltage DC	(V)	1500			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of Pmax	(%/°C)	-0.436			
Temp. coefficients of Voc	(%/°C)	-0.325			
Temp. coefficients of Isc	(%/°C)	0.054			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

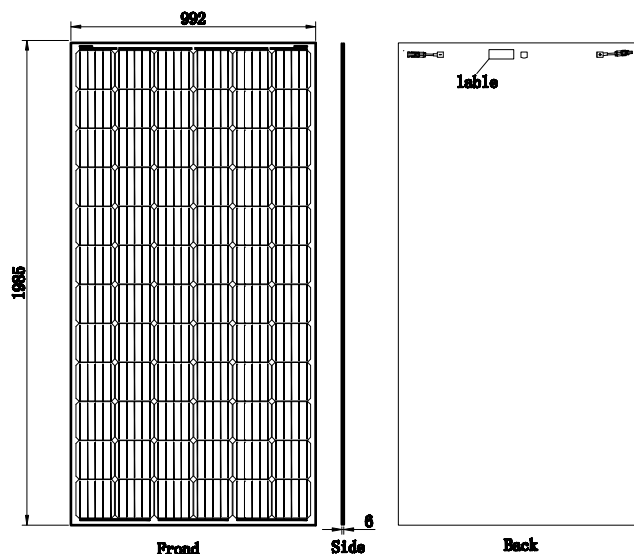
## MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline
Cell Dimension	156.75mm × 156.75mm
Dimensions	1985mm x 992mm x 6mm (J-box not included)
Weight	28kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

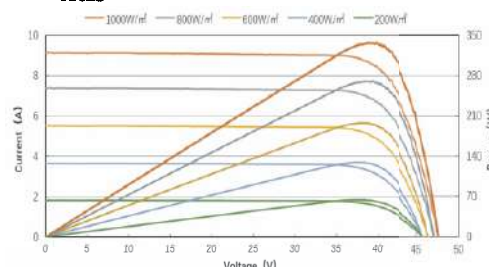
## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	726 pcs / 40HQ
Size / pallet (mm)	2035 x 1140 x 2264
Weight	1960 kg

## DIMENSIONS



## CERTIFICATES



Excellent performance at 200W/m<sup>2</sup>(AM 1.5, 25 °C): the conversion efficiency could be 96.5% of STC

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Inspiring green-energy since 2003

## AE DOUBLE-GLASS POLYCRYSTALLINE PV MODULES AE P6-60 Series 270W-290W THE LIGHTWEIGHT TECHNOLOGY

60



CELLS

MICRO-CRACK  
FREE



FIRE CLASS  
A



PID



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

**✓ GERMAN QUALITY**  
AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

**\$ HIGH RETURNS**  
This technology increases the performance ratio, eliminates the potential hazards and material degradation, ensures better safety, long life and high investment returns.

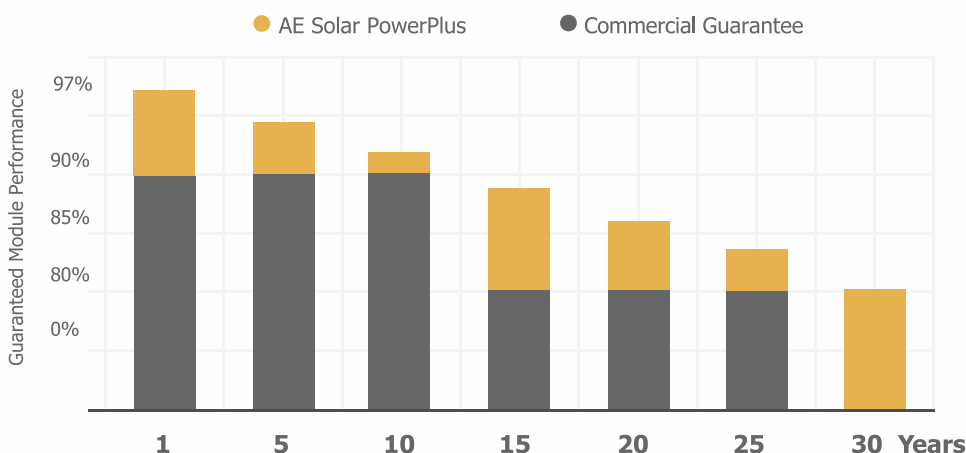
**🕒 PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

**+ PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

**🛡️ SAFETY**  
Back sheet is replaced by 2 mm tempered glass, ensuring additional safety, no back sheet degradation and surface for heat loss. Lower temperature offers better and more stable output during high temperature conditions.

**📄 CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE P6-60 Series 270W-290W

## SPECIFICATIONS

AE270P6-60 AE275P6-60 AE280P6-60 AE285P6-60 AE290P6-60

Nominal Max. Power	Pmax (Wp)	270	275	280	285	290
Maximum power voltage	Vmp(V)	31.07	31.42	31.78	32.13	32.47
Maximum power current	Imp (A)	8.69	8.75	8.81	8.87	8.93
Open-circuit voltage	Voc(V)	38.08	38.49	38.89	39.29	39.68
Short-circuit current	Isc (A)	9.09	9.16	9.23	9.30	9.37
Module efficiency	(%)	16.42	16.72	17.02	17.33	17.63
Power tolerance	Pmax (Wp)	0 / +4.99				
Maximum system voltage DC	(V)	1500				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of Pmax	(%/°C)	-0.433				
Temp. coefficients of Voc	(%/°C)	-0.328				
Temp. coefficients of Isc	(%/°C)	0.059				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

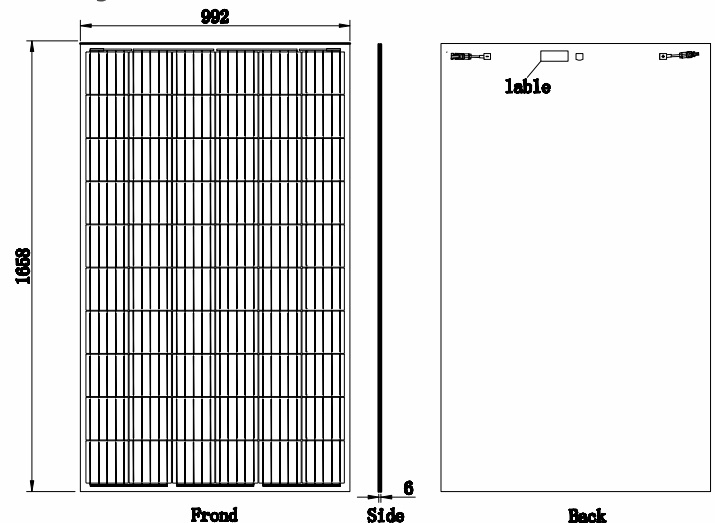
## MATERIAL CHARACTERISTICS

Cell Type	Poly-crystalline
Cell Dimension	156.75mm × 156.75mm
Dimensions	1658mm x 992mm x 6mm (J-box not included)
Weight	23kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

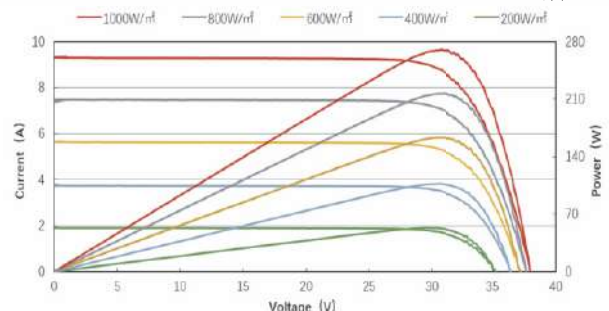
## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	858 pcs / 40HQ
Size / pallet (mm)	1710 x 1140 x 2264
Weight	1610 kg

## DIMENSIONS



## CERTIFICATES



Excellent performance at 200W/m<sup>2</sup>(AM 1.5, 25 °C): the conversion efficiency could be 96.2% of STC

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Inspiring green-energy since 2003

## AE DOUBLE-GLASS POLYCRYSTALLINE PV MODULES AE P6-72 Series 320W-345W THE LIGHTWEIGHT TECHNOLOGY

72

CELLS



MICRO-CRACK  
FREE



FIRE CLASS  
A



PID



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

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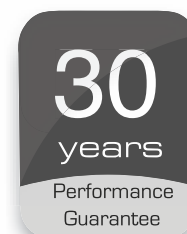
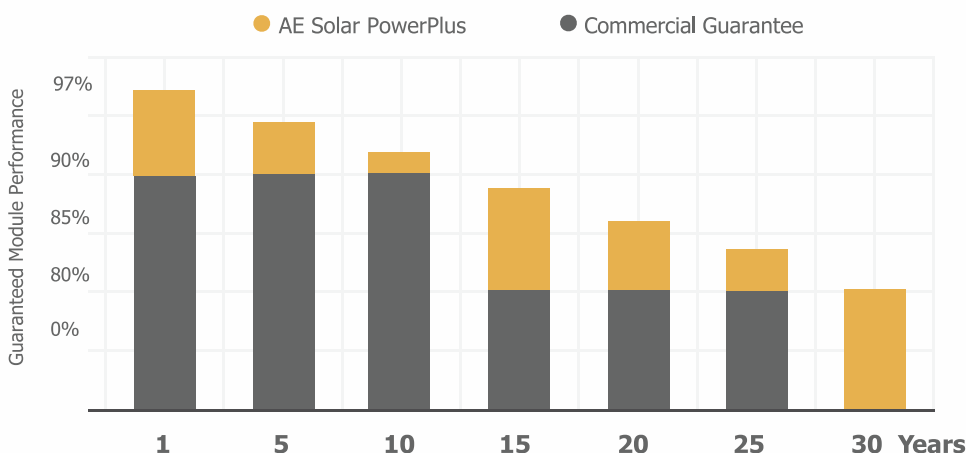
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**🛡️ SAFETY**  
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**📄 CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE P6-72 Series 320W-345W

## SPECIFICATIONS

AE320P6-72 AE325P6-72 AE330P6-72 AE335P6-72 AE340P6-72 AE345P6-72

Nominal Max. Power	P <sub>max</sub> (Wp)	320	325	330	335	340	345
Maximum power voltage	V <sub>mp</sub> (V)	37.47	37.79	38.11	38.42	38.72	39.03
Maximum power current	I <sub>mp</sub> (A)	8.54	8.60	8.66	8.72	8.78	8.84
Open-circuit voltage	V <sub>oc</sub> (V)	46.73	47.08	47.43	47.77	48.11	48.45
Short-circuit current	I <sub>sc</sub> (A)	8.78	8.85	8.92	8.99	9.06	9.13
Module efficiency	(%)	16.25	16.50	16.76	17.01	17.27	17.52
Power tolerance	P <sub>max</sub> (Wp)	0 / +4.99					
Maximum system voltage DC	(V)	1500					
Maximum series fuse rating	(A)	15					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.433					
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.328					
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.059					
Nom. Operating cell temp.(NOCT)	(°C)	45±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

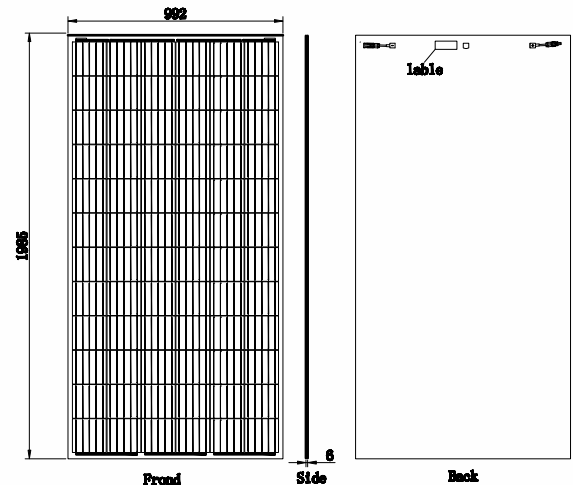
## MATERIAL CHARACTERISTICS

Cell Type	Poly-crystalline
Cell Dimension	156.75mm × 156.75mm
Dimensions	1958mm x 992mm x 6mm (J-box not included)
Weight	28kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

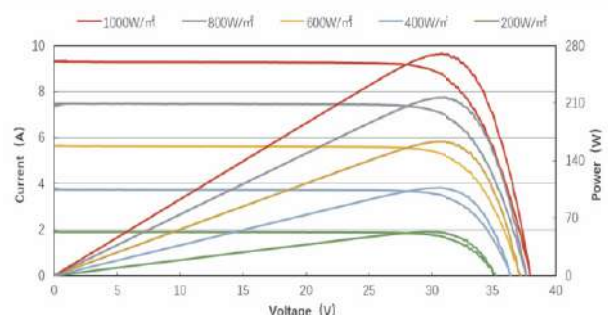
## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	726 pcs / 40HQ
Size / pallet (mm)	2035 x 1140 x 2264
Weight	1960 kg

## DIMENSIONS



## CERTIFICATES



Excellent performance at 200W/m<sup>2</sup>(AM 1.5, 25 °C): the conversion efficiency could be 96.2% of STC

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## AE DOUBLE GLASS LARGE CELL MONOCRYSTALLINE PV MODULES AE M6-60 Series 315W-335W THE LIGHTWEIGHT TECHNOLOGY

60



CELLS

MICRO-CRACK  
FREE



FIRE CLASS  
A



PID



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

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### \$ HIGH RETURNS

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### + PLUS-SORTING

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### SAFETY

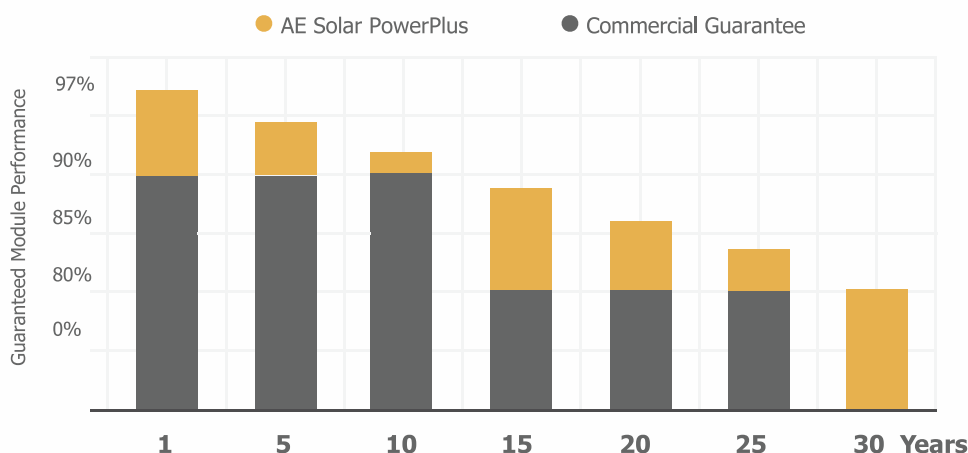
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### CERTIFICATES

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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE M6-60 Series 315W-335W

## SPECIFICATIONS

		AE315M6-60	AE320M6-60	AE325M6-60	AE330M6-60	AE335M6-60
Nominal Max. Power	P <sub>max</sub> (Wp)	315	320	325	330	335
Maximum power voltage	V <sub>mp</sub> (V)	33.20	33.40	33.61	33.81	34.02
Maximum power current	I <sub>mp</sub> (A)	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	V <sub>oc</sub> (V)	40.70	40.90	41.10	41.31	41.49
Short-circuit current	I <sub>sc</sub> (A)	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.71	19.01	19.31	19.60	19.90
Power tolerance	P <sub>max</sub> (Wp)	0 / +4.99				
Maximum system voltage DC	(V)	1500				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.37				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.28				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.048				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

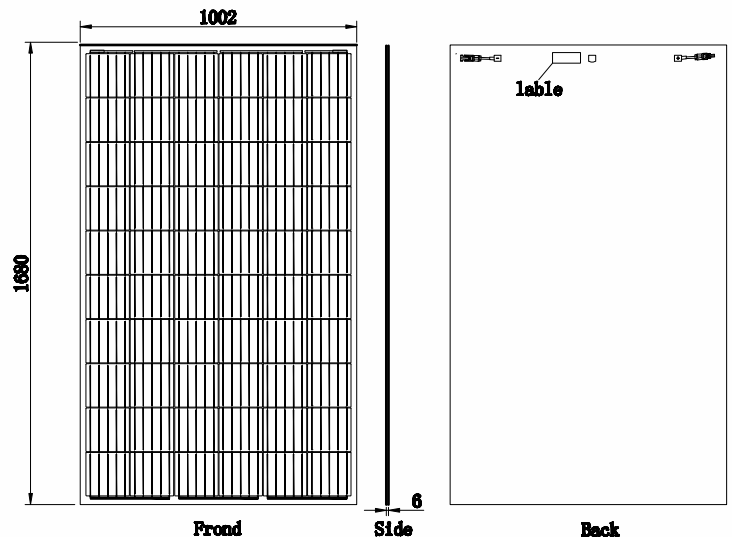
## MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline
Cell Dimension	158.75mm x 158.75mm
Dimensions	1680mm x 1002mm x 6mm (J-box not included)
Weight	23.5 kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	858 pcs / 40HQ
Size / pallet (mm)	1730 x 1140 x 2284
Weight	1650 kg

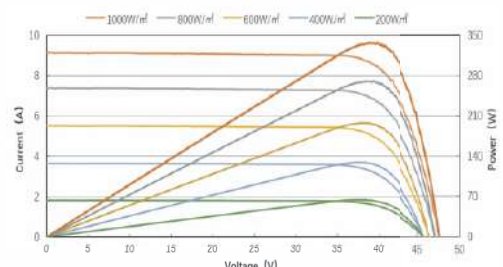
## DIMENSIONS



## CERTIFICATES



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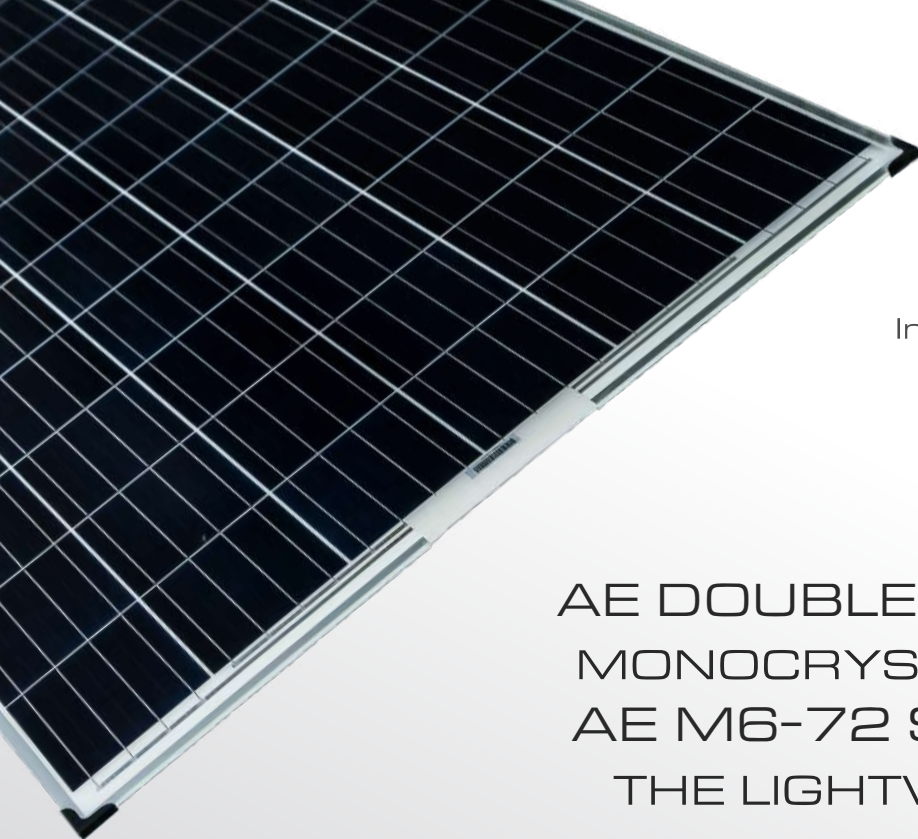
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## PERC Technology

### AE DOUBLE GLASS LARGE CELL MONOCRYSTALLINE PV MODULES AE M6-72 Series 380W-400W THE LIGHTWEIGHT TECHNOLOGY

72

CELLS



MICRO-CRACK  
FREE



FIRE CLASS  
A



PID



SALT CORROSION  
RESISTANT



SAND  
RESISTANT



AMMONIA  
RESISTANT



HIGHLY STABLE  
AND TOUGH

#### ✓ GERMAN QUALITY

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#### SAFETY

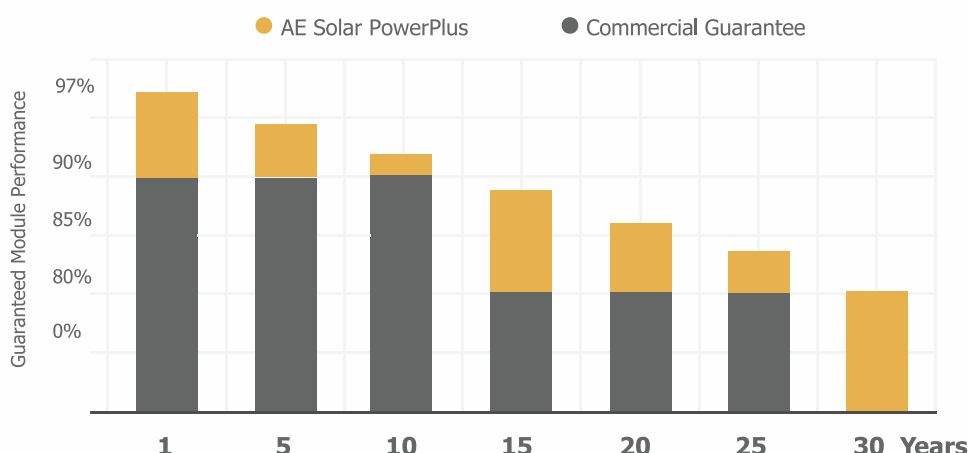
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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert



# TECHNICAL DATA

AE M6-72 Series 380W-400W

## SPECIFICATIONS

AE 380M6-72 AE385M6-72 AE390M6-72 AE395M6-72 AE400M6-72

Nominal Max. Power	Pmax (Wp)	380	385	390	395	400
Maximum power voltage	Vmp(V)	40.50	40.80	41.10	41.40	41.62
Maximum power current	Imp (A)	9.39	9.44	9.49	9.55	9.61
Open-circuit voltage	Voc(V)	48.90	49.10	49.30	49.50	49.70
Short-circuit current	Isc (A)	9.75	9.92	10.12	10.23	10.32
Module efficiency	(%)	18.94	19.19	19.44	19.69	19.94
Power tolerance	Pmax (Wp)	0 / +4.99				
Maximum system voltage DC	(V)	1500				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of Pmax	(%/°C)	-0.37				
Temp. coefficients of Voc	(%/°C)	-0.28				
Temp. coefficients of Isc	(%/°C)	0.048				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

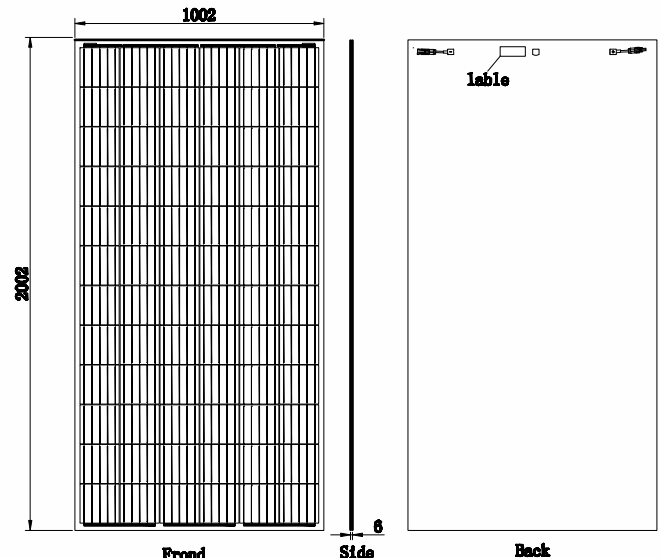
## MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline
Cell Dimension	158.75mm x 158.75mm
Dimensions	2002mm x 1002mm x 6mm (J-box not included)
Weight	28kg
Front Glass	2.5mm tempered AR glass
Encapsulant	POE
Back Glass	2.5 mm tempered glass / 2.5 mm ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4.0mm <sup>2</sup> , 300mm length or costumised
Connector	QC 4. 10-35
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

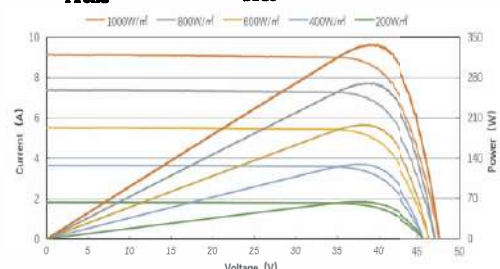
## PACKAGING INFORMATION

Packing configuration	66 pcs / pallet
Loading capacity	726 pcs / 40HQ
Size / pallet (mm)	2050 x 1140 x 2284
Weight	1970 kg

## DIMENSIONS



## CERTIFICATES



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# Core values

## Reliability ●●●

The best way to verify photovoltaic modules reliability is to observe its performance in a power plant. Modules must be able to withstand any external environmental factors and resist all types of natural stresses as they ultimately affect the power plant's performance and investment IRR.

We put a selection of PV modules through extreme environmental testing to ensure reliability and superior performance in even the world's most unforgiving conditions.



## AE POWER PLUS PV MODULES

tested by  **Fraunhofer**  
CSP



Deutsche  
Qualität  
Garantiert



Inspiring green-energy since 2003

## AE POWERPLUS MONOCRYSTALLINE PV MODULES AE M6-36 Series 165W-195W

tested by  **Fraunhofer**  
CSP

**36**

**CELLS**



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**

**NH<sub>3</sub>  
S**


**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

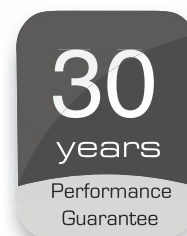
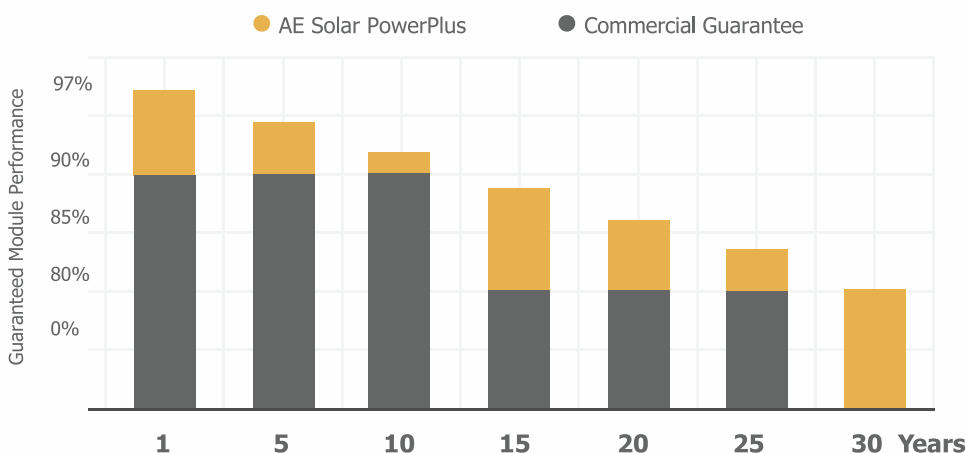
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 **PLUS-SORTING**  
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### OUR PERFORMANCE GUARANTEE



 Deutsche  
 Qualität  
 Garantiert

# TECHNICAL DATA

AE M6-36 Series 165W-195W

## SPECIFICATIONS

AE165M6-36 AE170M6-36 AE175M6-36 AE180M6-36 AE185M6-36 AE190M6-36 AE195M6-36

Nominal Max. Power	P <sub>max</sub> (Wp)	165	170	175	180	185	190	195
Maximum power voltage	V <sub>mp</sub> (V)	18.93	19.35	19.76	20.18	20.59	21.01	21.41
Maximum power current	I <sub>mp</sub> (A)	8.71	8.79	8.85	8.92	8.98	9.04	9.11
Open-circuit voltage	V <sub>oc</sub> (V)	23.02	23.23	23.44	23.64	23.85	24.06	24.27
Short-circuit current	I <sub>sc</sub> (A)	9.41	9.47	9.55	9.59	9.65	9.73	9.79
Module efficiency	(%)	16.64	17.14	17.65	18.15	18.66	19.16	19.67
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99						
Maximum system voltage DC	(V)	1000						
Maximum series fuse rating	(A)	15						
Operating temperature	(°C)	-40 to +85						
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38						
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29						
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05						
Nom. Operating cell temp.(NOCT)	(°C)	45±2						

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	36 (4 × 9)
Dimensions	1480 × 670 × 35 mm
Weight	10.8 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	90 pcs / double pallet
Loading Capacity	1350 pcs / 40HQ
Size / pallet (mm)	1510 × 1135 × 2370
Weight	1107 kg / pallet

## CERTIFICATES

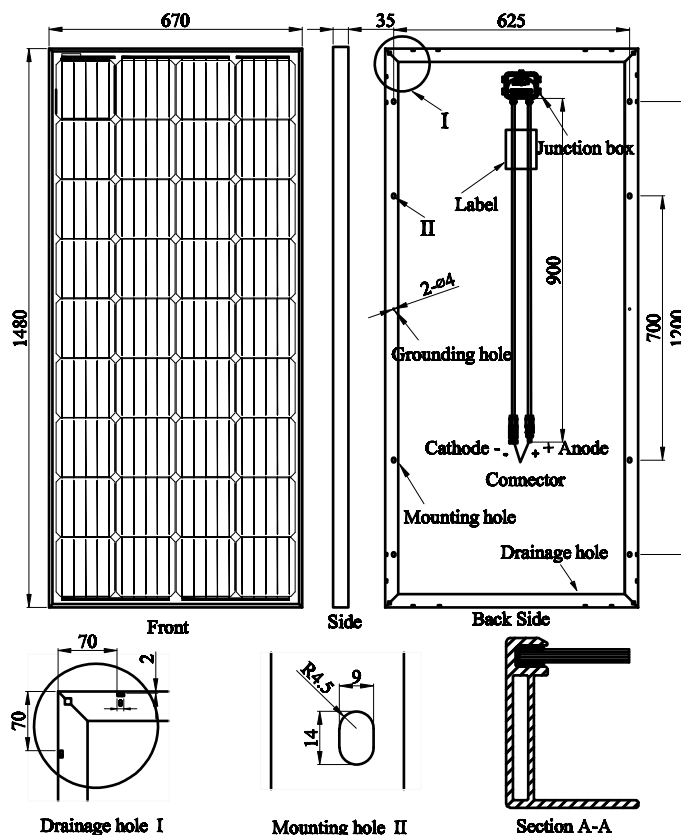


FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

AES-DSH2019 V.002

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## DIMENSIONS



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Web: www.ae-solar.com





Inspiring green-energy since 2003

## AE POWERPLUS MONOCRYSTALLINE PV MODULES AE M6-60 Series 280W-295W

tested by  **Fraunhofer**  
CSP

**60**

**CELLS**



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**


**NH<sub>3</sub>  
S**

**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

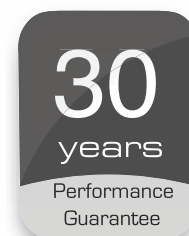
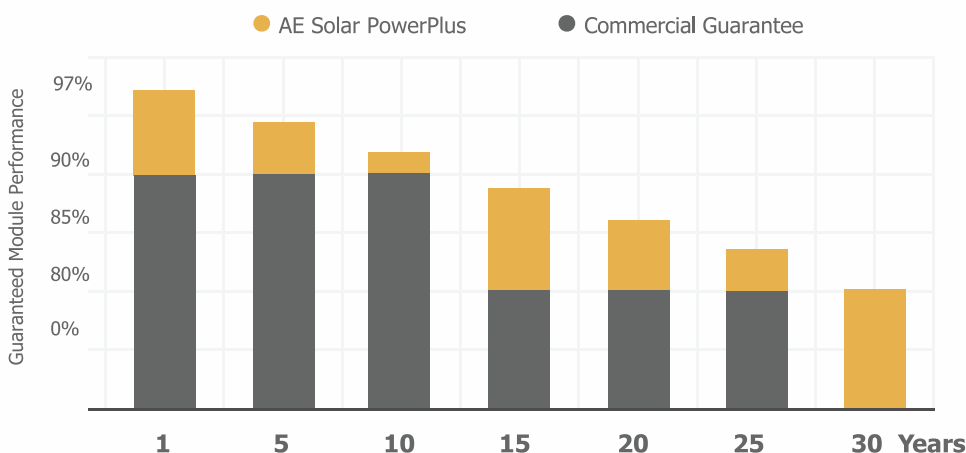
 **GERMAN QUALITY**  
AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

 **PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

 **PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

 **CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



 Deutsche  
 Qualität  
 Garantiert

# TECHNICAL DATA

AE M6-60 Series 280W-295W

## SPECIFICATIONS

		AE280M6-60	AE285M6-60	AE290M6-60	AE295M6-60
Nominal Max. Power	P <sub>max</sub> (Wp)	280	285	290	295
Maximum power voltage	V <sub>mp</sub> (V)	31.93	32.34	32.76	33.18
Maximum power current	I <sub>mp</sub> (A)	8.77	8.81	8.85	8.89
Open-circuit voltage	V <sub>oc</sub> (V)	38.52	38.73	38.94	39.15
Short-circuit current	I <sub>sc</sub> (A)	9.44	9.49	9.52	9.57
Module efficiency	(%)	17.11	17.41	17.72	18.02
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99			
Maximum system voltage DC	(V)	1000			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1650 × 992 × 35mm
Weight	17.5 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

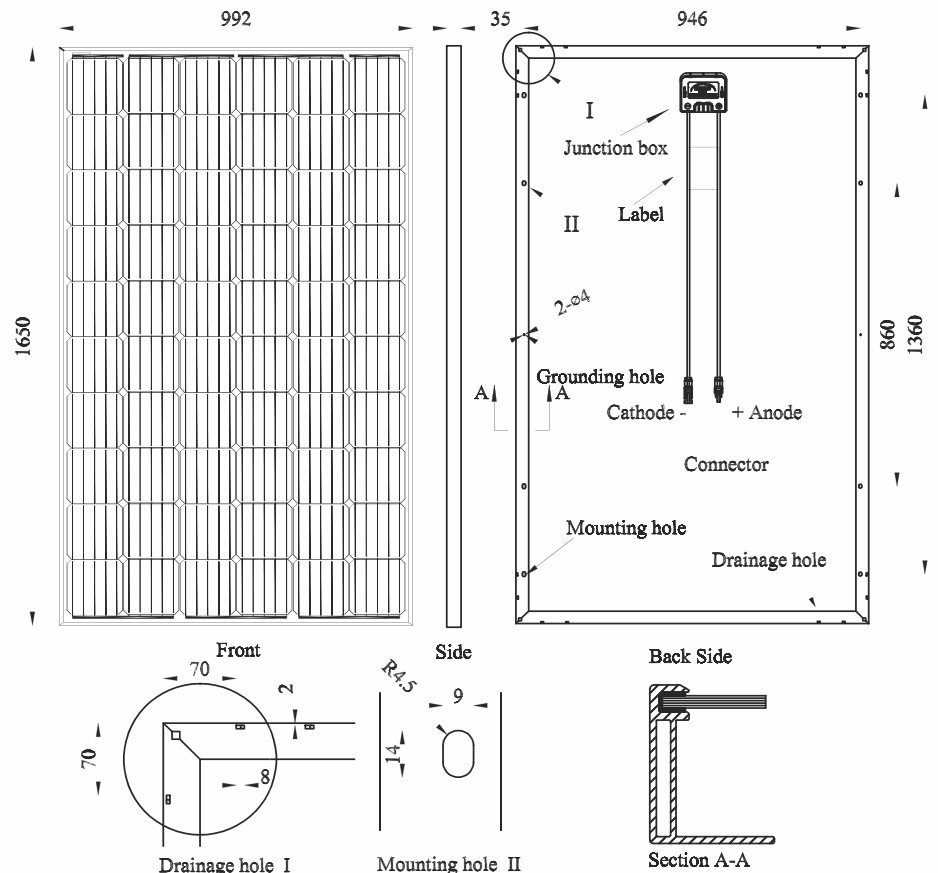
## PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1685 × 1135 × 2390
Weight	1220 kg / pallet

## CERTIFICATES



## DIMENSIONS



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## PERC Technology

### AE POWERPLUS MONOCRYSTALLINE PV MODULES AE M6-60 Series 300W-320W

tested by  **Fraunhofer**  
CSP

**60**

**CELLS**



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**


**NH<sub>3</sub>  
S**

**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

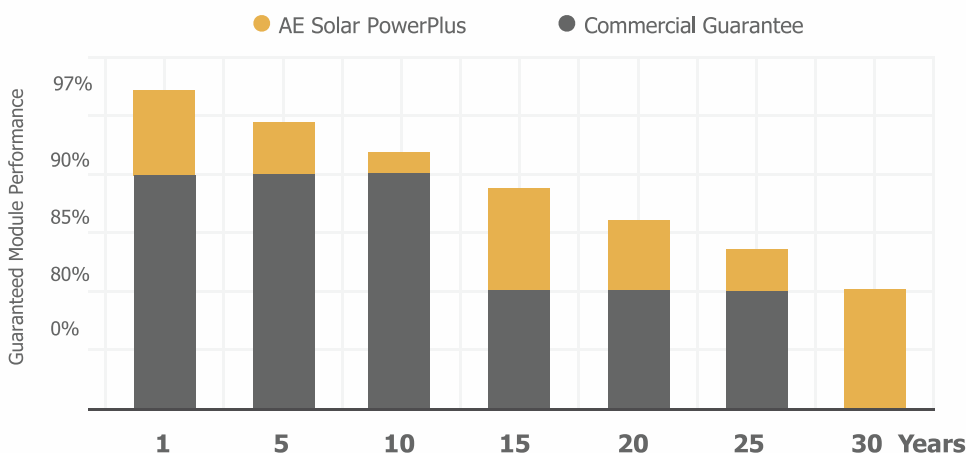
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## OUR PERFORMANCE GUARANTEE



 Deutsche  
 Qualität  
 Garantiert

# TECHNICAL DATA

AE M6-60 Series 300W-320W

## SPECIFICATIONS

AE300M6-60

AE305M6-60

AE310M6-60

AE315M6-60

AE320M6-60

Nominal Max. Power	P <sub>max</sub> (Wp)	300	305	310	315	320
Maximum power voltage	V <sub>mp</sub> (V)	33.59	34.01	34.42	34.84	35.19
Maximum power current	I <sub>mp</sub> (A)	8.93	8.97	9.01	9.04	9.11
Open-circuit voltage	V <sub>oc</sub> (V)	39.36	39.56	39.77	39.98	40.21
Short-circuit current	I <sub>sc</sub> (A)	9.62	9.66	9.71	9.77	9.83
Module efficiency	(%)	18.33	18.63	18.94	19.24	19.55
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1000				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

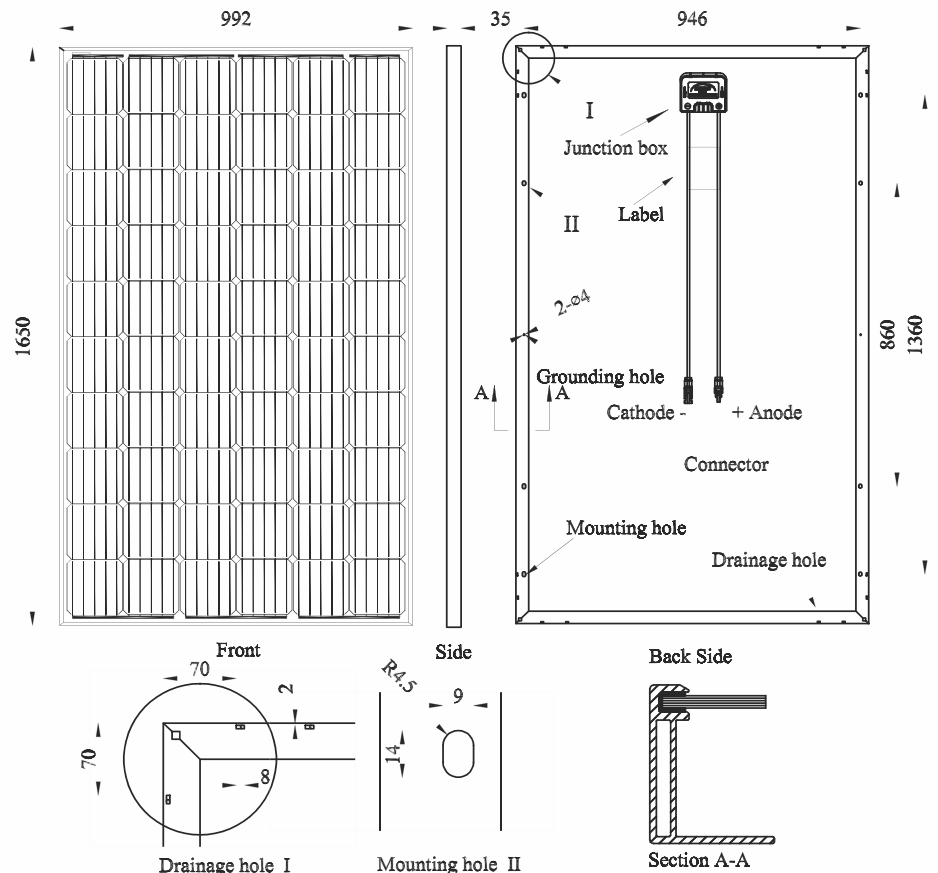
## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1650 × 992 × 35mm
Weight	17.5 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1685 × 1135 × 2390
Weight	1220 kg / pallet

## DIMENSIONS



## CERTIFICATES



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## AE POWERPLUS MONOCRYSTALLINE PV MODULES AE M6-72 Series 340 W-360W

tested by  **Fraunhofer**  
CSP

**72**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**




**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

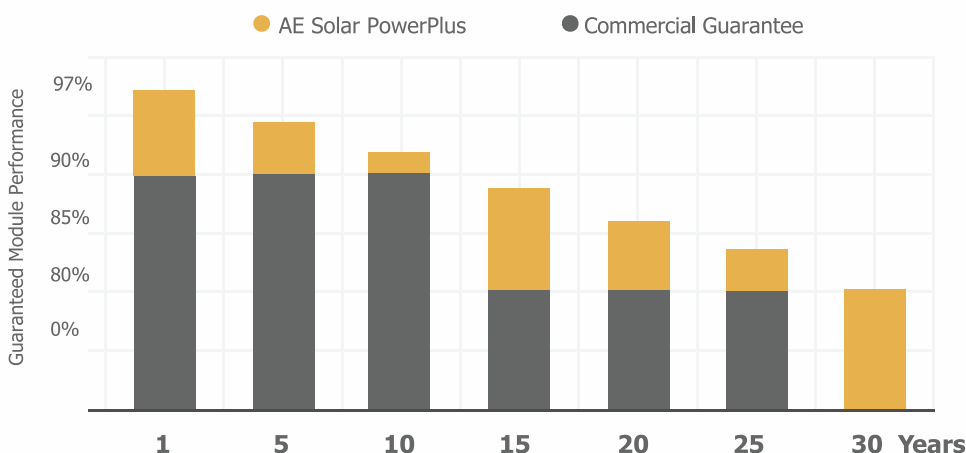
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 **PERFORMANCE GUARANTEE**  
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 **CERTIFICATES**  
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### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE M6-72 Series 340W-360W

### SPECIFICATIONS

		AE340M6-72	AE345M6-72	AE350M6-72	AE355M6-72	AE360M6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	340	345	350	355	360
Maximum power voltage	V <sub>mp</sub> (V)	39.09	39.34	39.46	39.51	39.55
Maximum power current	I <sub>mp</sub> (A)	8.70	8.77	8.87	8.99	9.10
Open-circuit voltage	V <sub>oc</sub> (V)	46.94	47.08	47.149	47.3	47.38
Short-circuit current	I <sub>sc</sub> (A)	9.48	9.51	9.551	9.58	9.62
Module efficiency	(%)	17.52	17.78	18.04	18.30	18.55
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1000				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 × 12)
Dimensions	1956 × 992 × 40mm
Weight	21 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

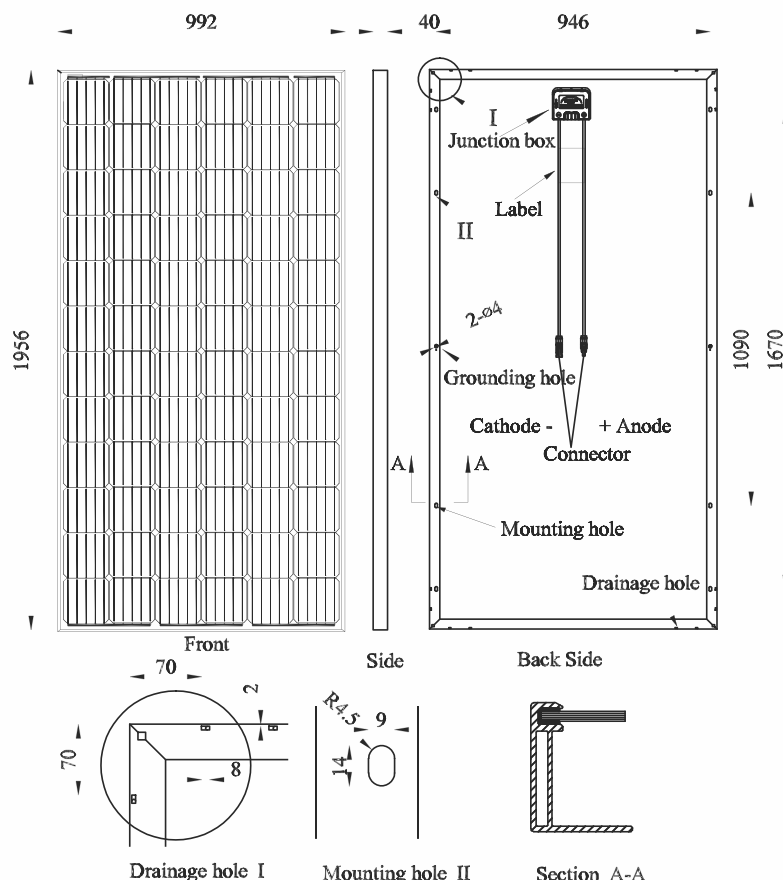
### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	672 pcs / 40HQ
Size / pallet (mm)	1985 × 1120 × 2410
Weight	1295 kg / pallet

### CERTIFICATES



### DIMENSIONS



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## PERC Technology

### AE POWERPLUS MONOCRYSTALLINE PV MODULES AE M6-72 Series 365 W-385W

tested by  **Fraunhofer**  
CSP

**72**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**



**SAND  
RESISTANT**



**AMMONIA  
RESISTANT**



**HIGHLY STABLE  
AND TOUGH**

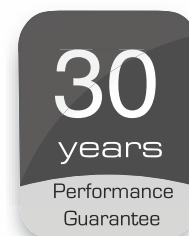
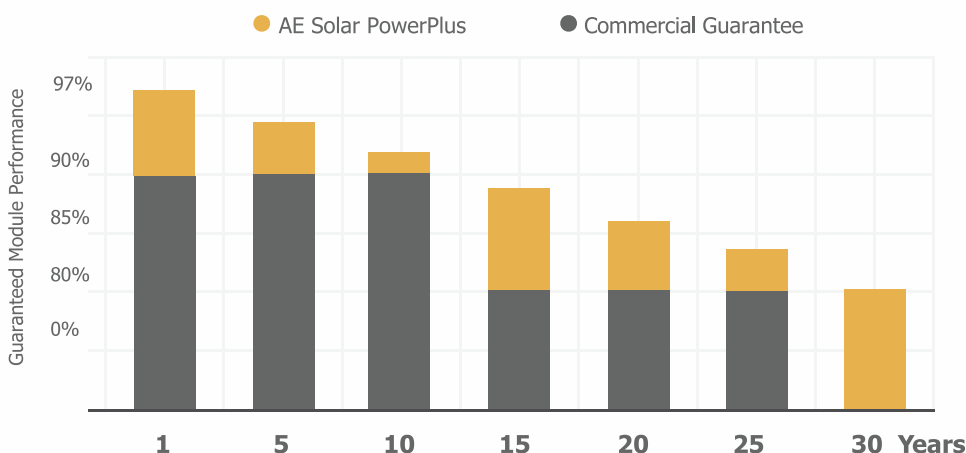
**✓ GERMAN QUALITY**  
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**+ PLUS-SORTING**  
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**📄 CERTIFICATES**  
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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE M6-72 Series 365W-385W

### SPECIFICATIONS

		AE365M6-72	AE370M6-72	AE375M6-72	AE380M6-72	AE385M6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	365	370	375	380	385
Maximum power voltage	V <sub>mp</sub> (V)	39.58	39.63	39.66	39.71	39.73
Maximum power current	I <sub>mp</sub> (A)	9.22	9.34	9.46	9.57	9.69
Open-circuit voltage	V <sub>oc</sub> (V)	47.42	47.48	47.53	47.59	47.81
Short-circuit current	I <sub>sc</sub> (A)	9.65	9.69	9.75	9.82	9.95
Module efficiency	(%)	18.81	19.07	19.33	19.58	19.84
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1000				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 × 12)
Dimensions	1956 × 992 × 40mm
Weight	21 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

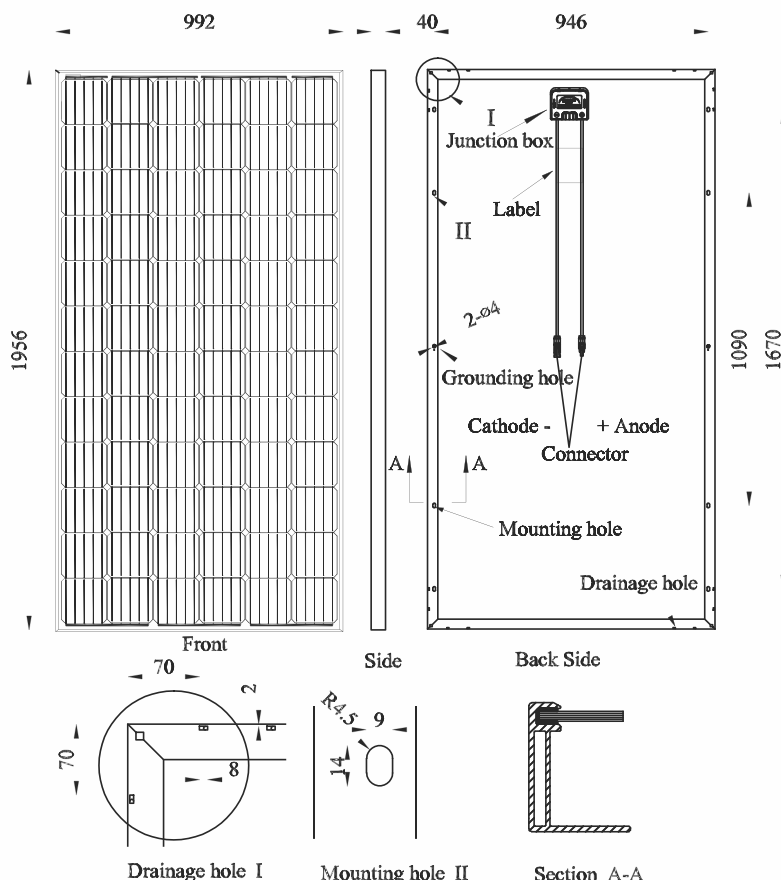
### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	672 pcs / 40HQ
Size / pallet (mm)	1985 × 1120 × 2410
Weight	1295 kg / pallet

### CERTIFICATES



### DIMENSIONS



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## AE POWERPLUS POLYCRYSTALLINE PV MODULES AE P6-36 Series 155W-175W

tested by  **Fraunhofer**  
CSP

**36**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**


$\frac{NH_3}{S}$

**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

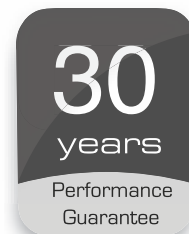
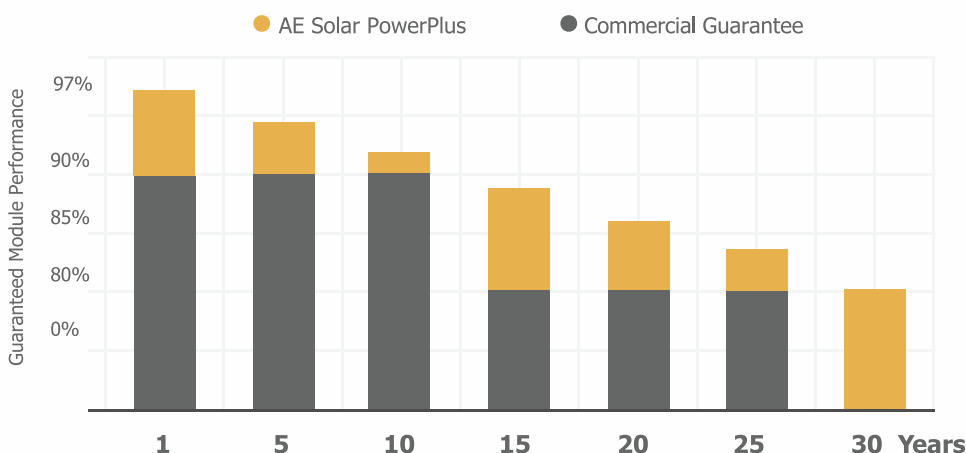
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### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

AE P6-36 Series 155W-175W

## SPECIFICATIONS

AE155M6-36

AE160M6-36

AE165M6-36

AE170M6-36

AE175M6-36

Nominal Max. Power	P <sub>max</sub> (Wp)	155	160	165	170	175
Maximum power voltage	V <sub>mp</sub> (V)	17.90	18.32	18.73	19.15	19.56
Maximum power current	I <sub>mp</sub> (A)	8.66	8.73	8.81	8.88	8.95
Open-circuit voltage	V <sub>oc</sub> (V)	22.69	22.90	23.10	23.31	23.52
Short-circuit current	I <sub>sc</sub> (A)	9.27	9.31	9.35	9.42	9.48
Module efficiency	(%)	15.63	16.14	16.64	17.14	17.65
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1000				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

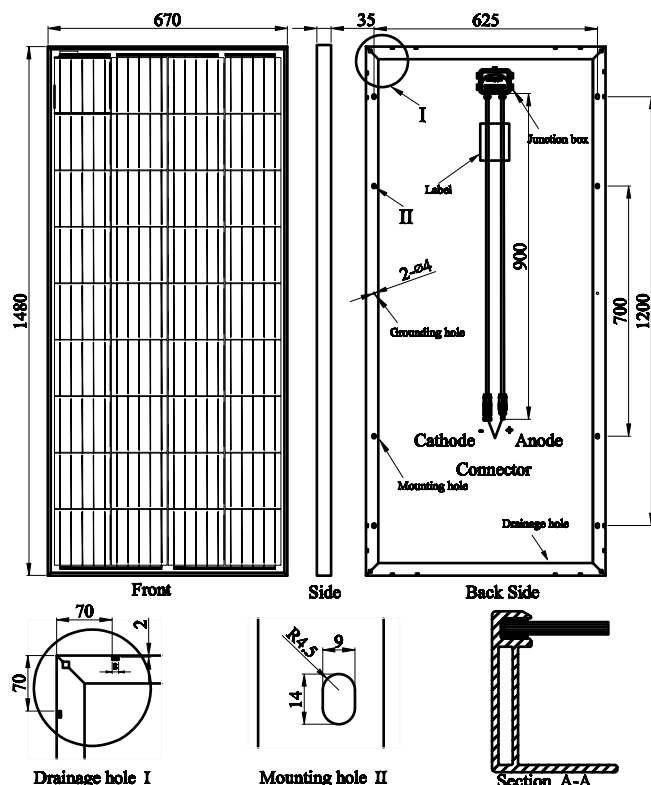
## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	36 (4 × 9)
Dimensions	1480 × 670 × 35 mm
Weight	10.8 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	90 pcs / double pallet
Loading Capacity	1350 pcs / 40HQ
Size / pallet (mm)	1510 × 1135 × 2370
Weight	1107 kg / pallet

## DIMENSIONS



## CERTIFICATES



FOR INNOVATIVE  
SHADING RESISTANT  
MODULES DEVELOPMENT

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## AE POWERPLUS POLYCRYSTALLINE PV MODULES AE P6-60 Series 265 W-290W

tested by  **Fraunhofer**  
CSP

**60**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**


$\frac{NH_3}{S}$

**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

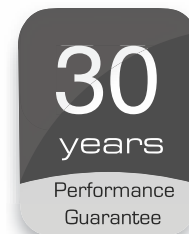
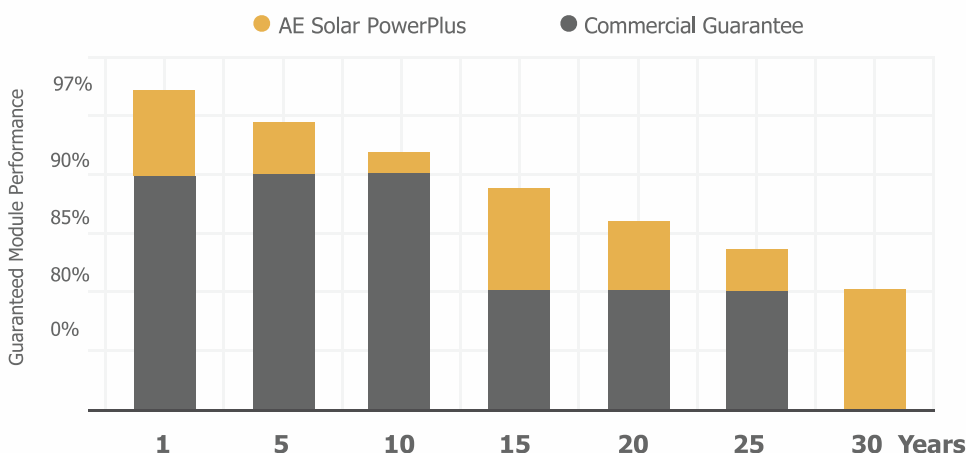
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 **PERFORMANCE GUARANTEE**  
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### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE P6-60 Series 265W-290W

### SPECIFICATIONS

		AE265P6-60	AE270P6-60	AE275P6-60	AE280P6-60	AE285P6-60	AE290P6-60
Nominal Max. Power	P <sub>max</sub> (Wp)	265	270	275	280	285	290
Maximum power voltage	V <sub>mp</sub> (V)	30.41	30.82	31.24	31.65	32.07	32.48
Maximum power current	I <sub>mp</sub> (A)	8.71	8.76	8.80	8.85	8.89	8.93
Open-circuit voltage	V <sub>oc</sub> (V)	38.10	38.31	38.52	38.72	38.93	39.14
Short-circuit current	I <sub>sc</sub> (A)	9.26	9.31	9.35	9.38	9.44	9.47
Module efficiency	(%)	16.19	16.50	16.80	17.11	17.41	17.72
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99					
Maximum system voltage DC	(V)	1000					
Maximum series fuse rating	(A)	15					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40					
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31					
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053					
Nom. Operating cell temp.(NOCT)	(°C)	45±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1650 x 992 x 35mm
Weight	17,5 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

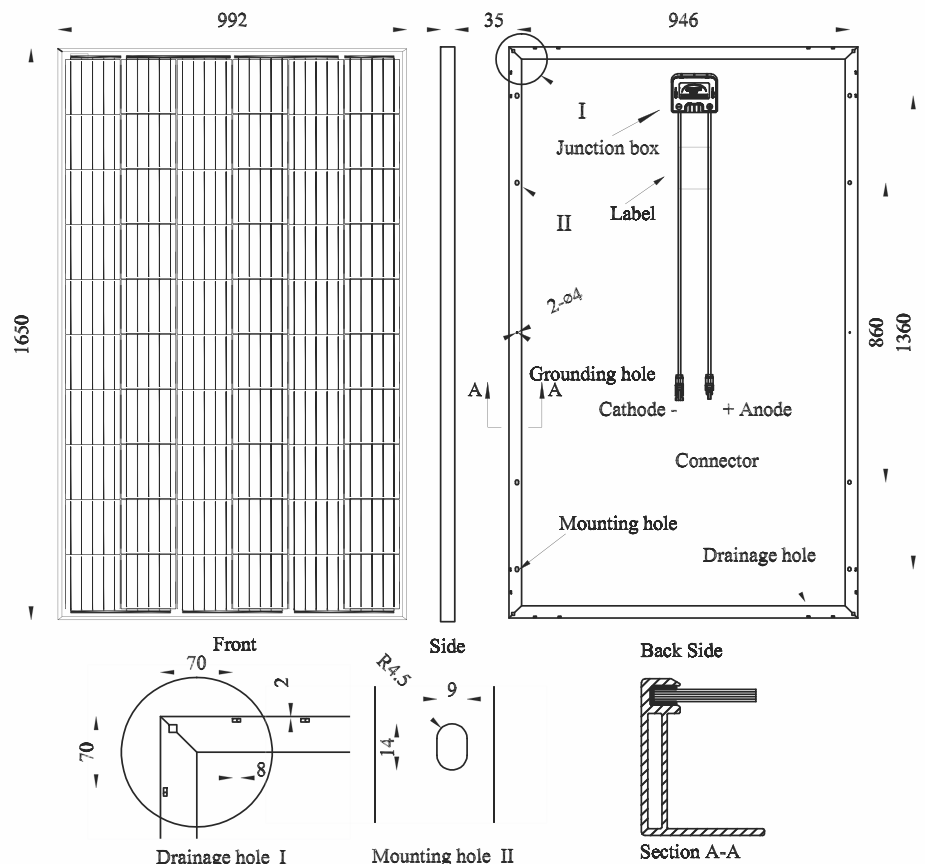
### PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1685 x 1135 x 2390
Weight	1220 kg / pallet

### CERTIFICATES



### DIMENSIONS



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Inspiring green-energy since 2003

## AE POWERPLUS POLYCRYSTALLINE PV MODULES AE P6-72 Series 315W-345W

tested by  **Fraunhofer**  
CSP

**72**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**


$\frac{NH_3}{S}$

**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

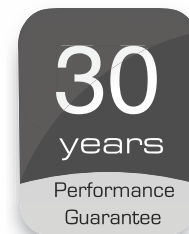
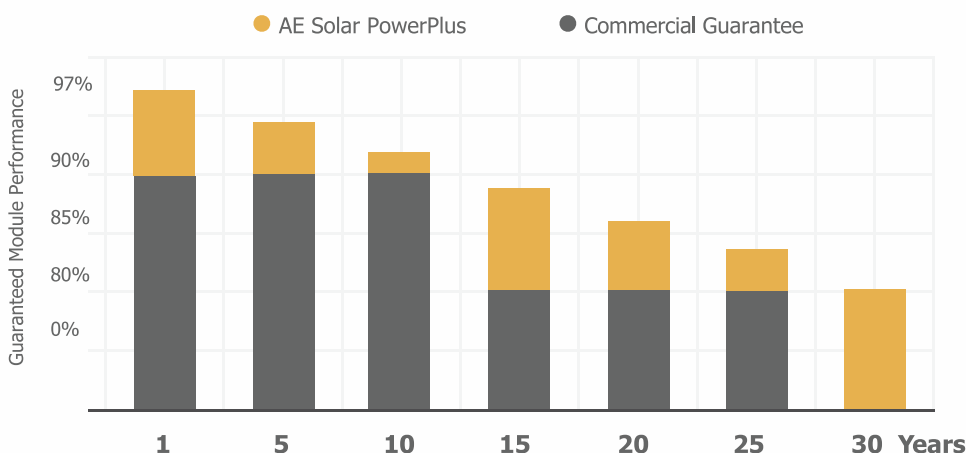
 **GERMAN QUALITY**  
AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

 **PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

 **PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

 **CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE P6-72 Series 315W-345W

### SPECIFICATIONS

		AE315P6-72	AE320P6-72	AE325P6-72	AE330P6-72	AE335P6-72	AE340P6-72	AE345P6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	315	320	325	330	335	340	345
Maximum power voltage	V <sub>mp</sub> (V)	36.66	36.75	36.83	36.97	37.05	37.09	37.18
Maximum power current	I <sub>mp</sub> (A)	8.59	8.71	8.82	8.93	9.04	9.17	9.28
Open-circuit voltage	V <sub>oc</sub> (V)	45.59	45.72	45.83	45.89	45.93	45.97	46.62
Short-circuit current	I <sub>sc</sub> (A)	9.24	9.28	9.33	9.37	9.41	9.44	9.61
Module efficiency	(%)	16.23	16.49	16.75	17.01	17.26	17.52	17.78
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99						
Maximum system voltage DC	(V)	1000						
Maximum series fuse rating	(A)	15						
Operating temperature	(°C)	-40 to +85						
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40						
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31						
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053						
Nom. Operating cell temp.(NOCT)	(°C)	45±2						

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

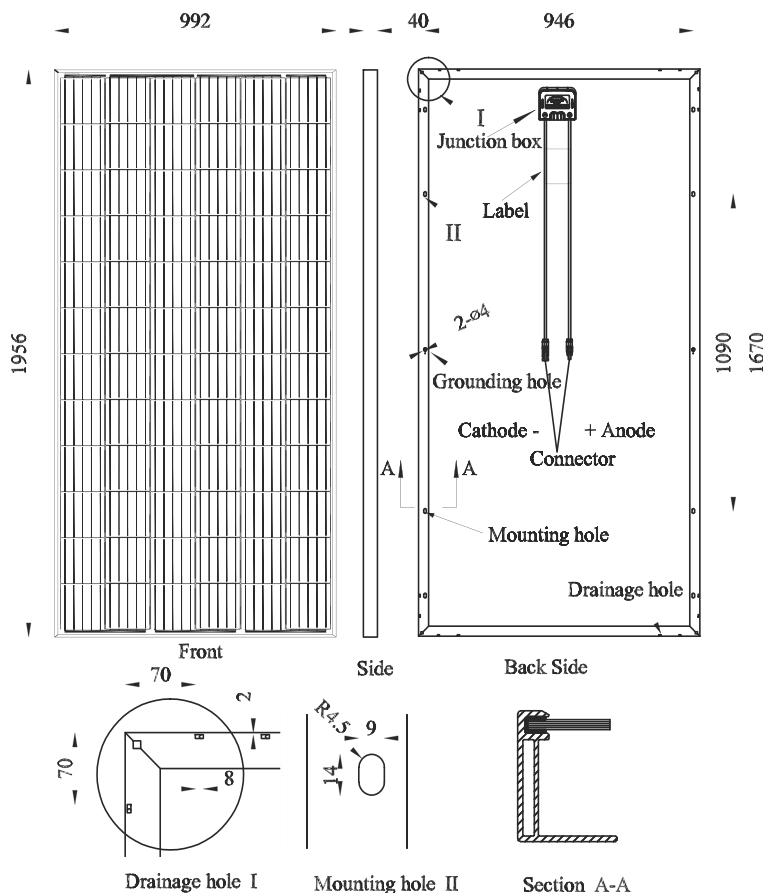
### MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 x 12)
Dimensions	1956 x 992 x 40mm
Weight	21 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	672 pcs / 40HQ
Size / pallet (mm)	1985 x 1120 x 2410
Weight	1295 kg / pallet

### DIMENSIONS



### CERTIFICATES



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Inspiring green-energy since 2003

## AE POWERPLUS IEC 1500VDC MONOCRYSTALLINE PV MODULES AE M6-60 Series 280W-295W

tested by  **Fraunhofer**  
CSP

**60**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**

**NH<sub>3</sub>  
S**


**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

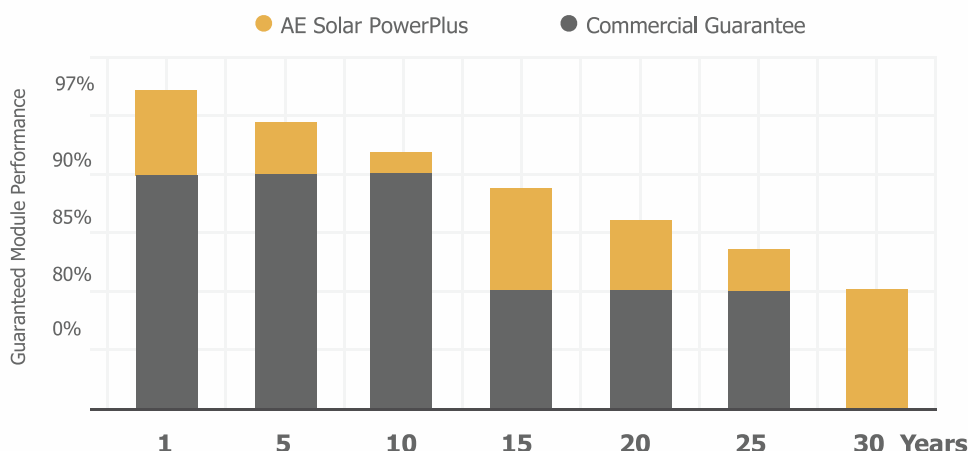
 **GERMAN QUALITY**  
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 **PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

 **PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

 **CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



 Deutsche  
 Qualität  
 Garantiert

# TECHNICAL DATA

AE M6-60 Series 280W-295W

## SPECIFICATIONS

		AE280M6-60	AE285M6-60	AE290M6-60	AE295M6-60
Nominal Max. Power	P <sub>max</sub> (Wp)	280	285	290	295
Maximum power voltage	V <sub>mp</sub> (V)	31.93	32.34	32.76	33.18
Maximum power current	I <sub>mp</sub> (A)	8.77	8.81	8.85	8.89
Open-circuit voltage	V <sub>oc</sub> (V)	38.52	38.73	38.94	39.15
Short-circuit current	I <sub>sc</sub> (A)	9.44	9.49	9.52	9.57
Module efficiency	(%)	17.11	17.41	17.72	18.02
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99			
Maximum system voltage DC	(V)	1500			
Maximum series fuse rating	(A)	15			
Operating temperature	(°C)	-40 to +85			
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1650 × 992 × 35mm
Weight	17.5 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

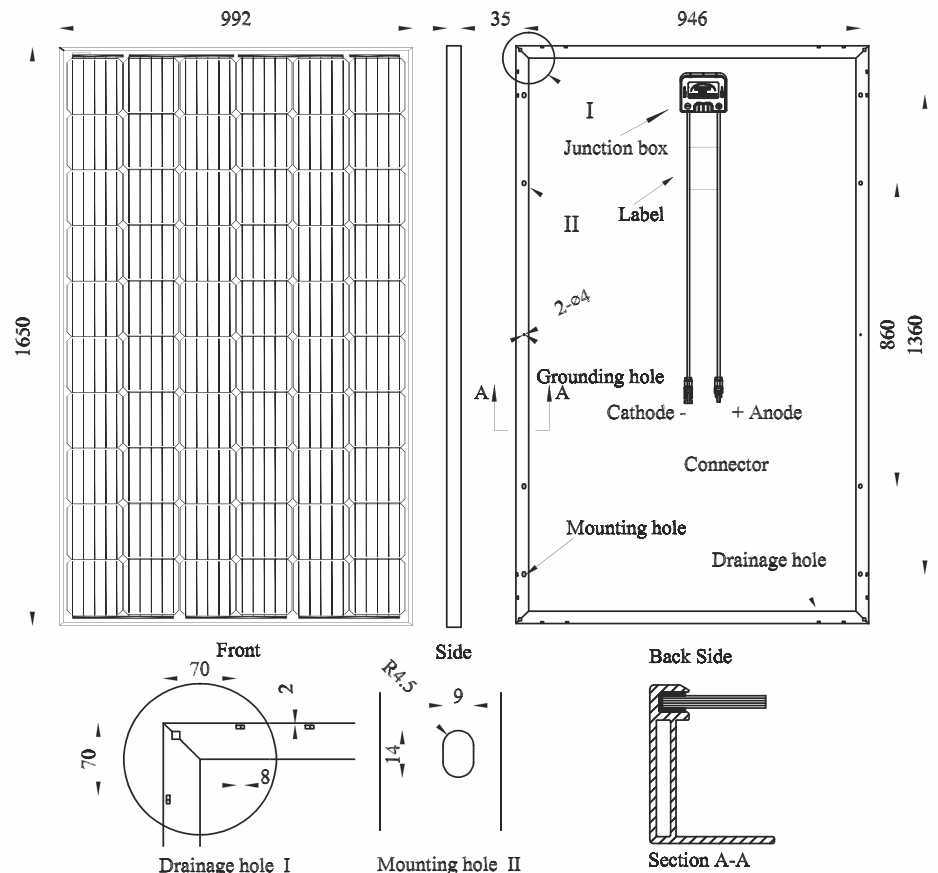
## PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1685 × 1135 × 2390
Weight	1220 kg / pallet

## CERTIFICATES



## DIMENSIONS



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## PERC Technology

# AE POWERPLUS IEC 1500VDC MONOCRYSTALLINE PV MODULES AE M6-60 Series 300W-320W

tested by  **Fraunhofer**  
CSP

**60**

**CELLS**



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**



**SAND  
RESISTANT**

**NH<sub>3</sub>  
S**

**AMMONIA  
RESISTANT**



**HIGHLY STABLE  
AND TOUGH**

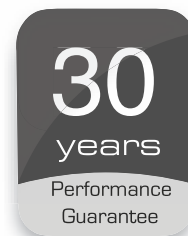
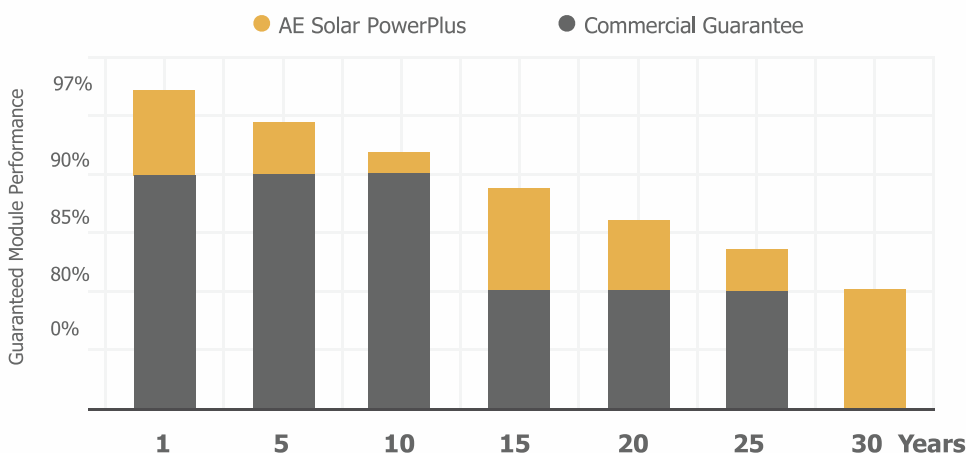
**✓ GERMAN QUALITY**  
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**+ PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

**⌚ PERFORMANCE GUARANTEE**  
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**📄 CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

## OUR PERFORMANCE GUARANTEE



**Deutsche  
Qualität  
Garantiert**

# TECHNICAL DATA

AE M6-60 Series 300W-320W

## SPECIFICATIONS

AE300M6-60

AE305M6-60

AE310M6-60

AE315M6-60

AE320M6-60

Nominal Max. Power	P <sub>max</sub> (Wp)	300	305	310	315	320
Maximum power voltage	V <sub>mp</sub> (V)	33.59	34.01	34.42	34.84	35.19
Maximum power current	I <sub>mp</sub> (A)	8.93	8.97	9.01	9.04	9.11
Open-circuit voltage	V <sub>oc</sub> (V)	39.36	39.56	39.77	39.98	40.21
Short-circuit current	I <sub>sc</sub> (A)	9.62	9.66	9.71	9.77	9.83
Module efficiency	(%)	18.33	18.63	18.94	19.24	19.55
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1500				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

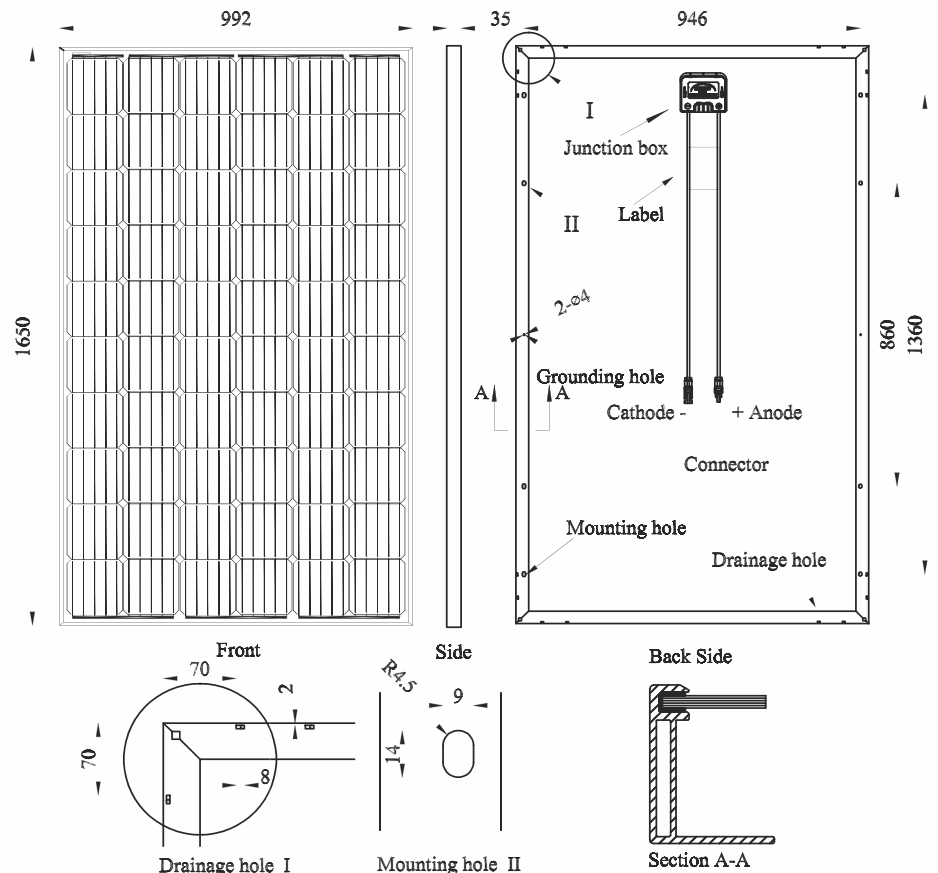
## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1650 × 992 × 35mm
Weight	17.5 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1685 × 1135 × 2390
Weight	1220 kg / pallet

## DIMENSIONS



## CERTIFICATES



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Inspiring green-energy since 2003

## AE POWERPLUS IEC 1500VDC MONOCRYSTALLINE PV MODULES AE M6-72 Series 340 W-360W

tested by  **Fraunhofer**  
CSP

**72**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**




**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

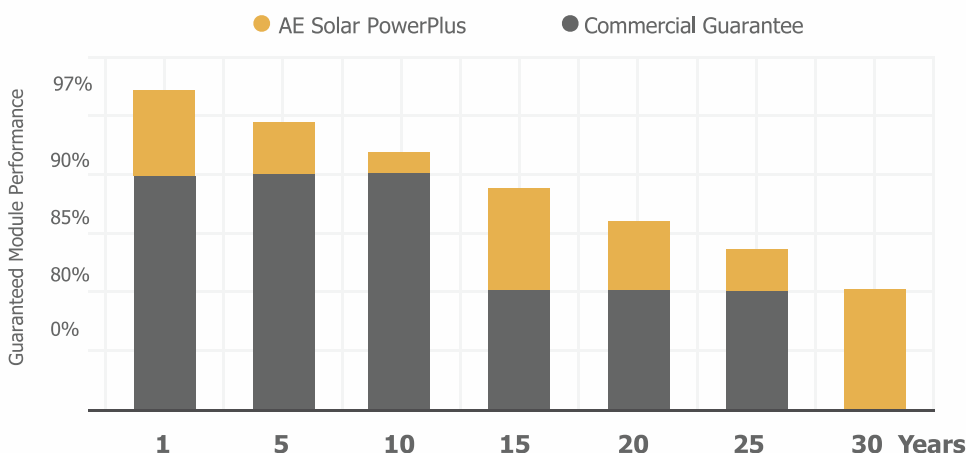
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 **PERFORMANCE GUARANTEE**  
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 **CERTIFICATES**  
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### OUR PERFORMANCE GUARANTEE



**30**  
years  
Performance  
Guarantee

**12**  
years  
Product  
Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE M6-72 Series 340W-360W

### SPECIFICATIONS

		AE340M6-72	AE345M6-72	AE350M6-72	AE355M6-72	AE360M6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	340	345	350	355	360
Maximum power voltage	V <sub>mp</sub> (V)	39.09	39.34	39.46	39.51	39.55
Maximum power current	I <sub>mp</sub> (A)	8.70	8.77	8.87	8.99	9.10
Open-circuit voltage	V <sub>oc</sub> (V)	46.94	47.08	47.149	47.3	47.38
Short-circuit current	I <sub>sc</sub> (A)	9.48	9.51	9.551	9.58	9.62
Module efficiency	(%)	17.52	17.78	18.04	18.30	18.55
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1500				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 × 12)
Dimensions	1956 × 992 × 40mm
Weight	21 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

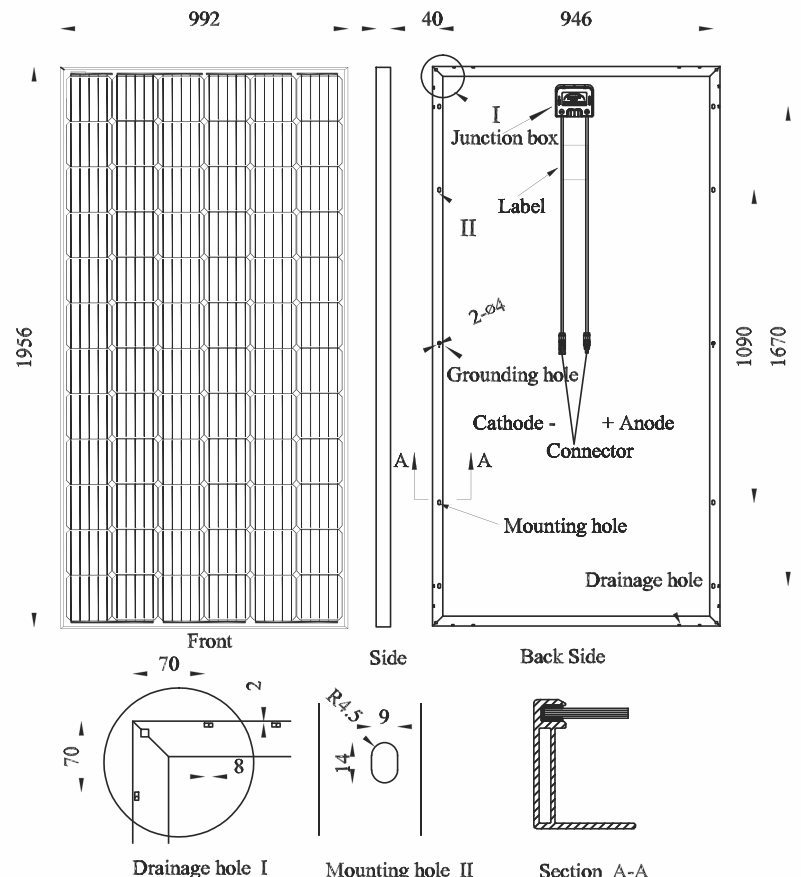
### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	672 pcs / 40HQ
Size / pallet (mm)	1985 × 1120 × 2410
Weight	1295 kg / pallet

### CERTIFICATES



### DIMENSIONS



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## PERC Technology

# AE POWERPLUS IEC 1500VDC MONOCRYSTALLINE PV MODULES AE M6-72 Series 365 W-385W

tested by  **Fraunhofer**  
CSP

72

CELLS



MICRO-CRACK  
FREE



PID  
RESISTANT



SALT CORROSION  
RESISTANT




SAND  
RESISTANT




AMMONIA  
RESISTANT




HIGHLY STABLE  
AND TOUGH

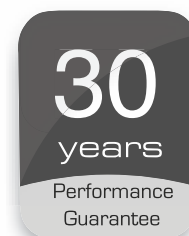
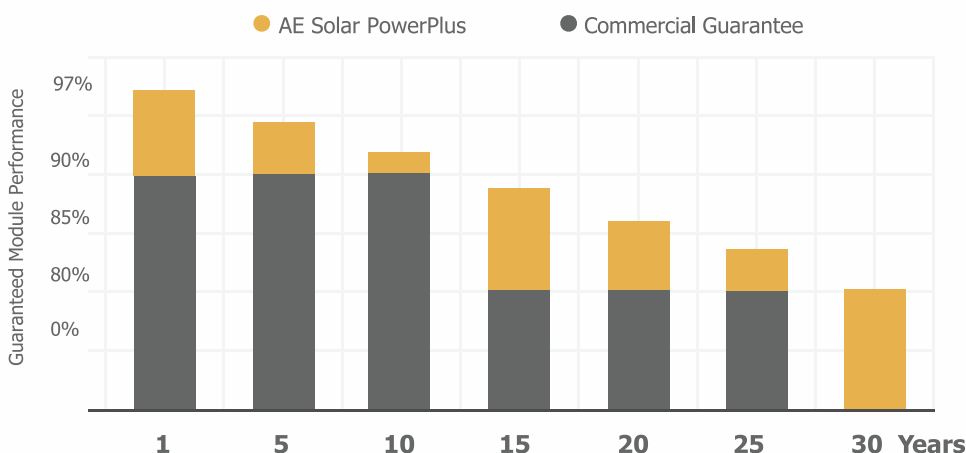
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 **PLUS-SORTING**  
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 **PERFORMANCE GUARANTEE**  
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 **CERTIFICATES**  
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## OUR PERFORMANCE GUARANTEE



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## AE M6-72 Series 365W-385W

### SPECIFICATIONS

		AE365M6-72	AE370M6-72	AE375M6-72	AE380M6-72	AE385M6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	365	370	375	380	385
Maximum power voltage	V <sub>mp</sub> (V)	39.58	39.63	39.66	39.71	39.73
Maximum power current	I <sub>mp</sub> (A)	9.22	9.34	9.46	9.57	9.69
Open-circuit voltage	V <sub>oc</sub> (V)	47.42	47.48	47.53	47.59	47.81
Short-circuit current	I <sub>sc</sub> (A)	9.65	9.69	9.75	9.82	9.95
Module efficiency	(%)	18.81	19.07	19.33	19.58	19.84
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99				
Maximum system voltage DC	(V)	1500				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.38				
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.29				
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 × 12)
Dimensions	1956 × 992 × 40mm
Weight	21 kg
Junction box	IP 67 rated
Output cable	1 × 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

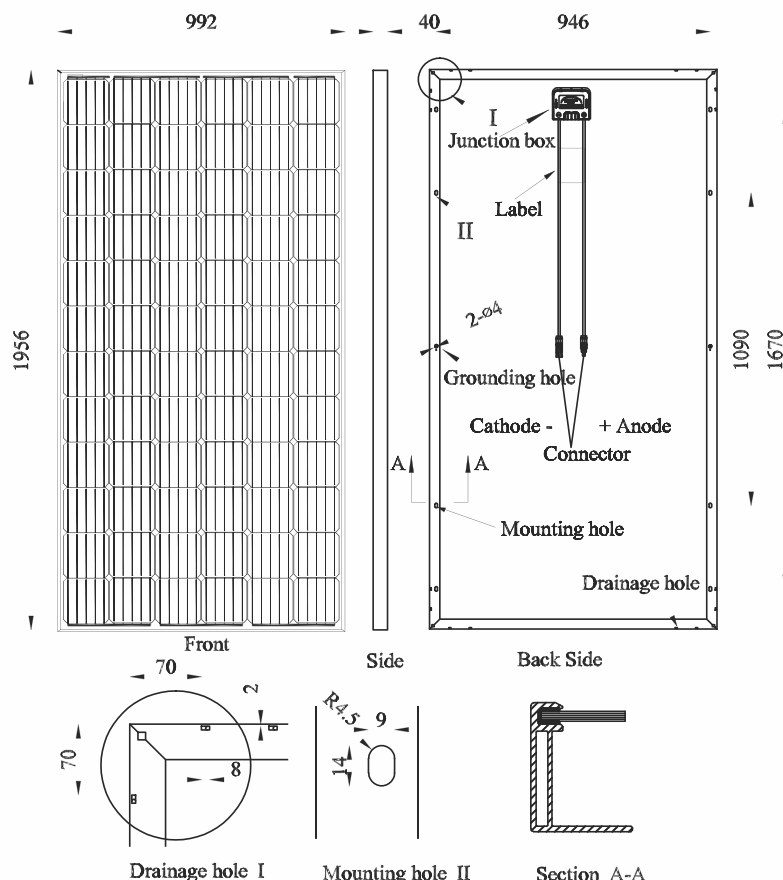
### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	672 pcs / 40HQ
Size / pallet (mm)	1985 × 1120 × 2410
Weight	1295 kg / pallet

### CERTIFICATES



### DIMENSIONS



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Inspiring green-energy since 2003

## AE POWERPLUS IEC 1500VDC POLYCRYSTALLINE PV MODULES AE P6-60 Series 265 W-290W

tested by  **Fraunhofer**  
CSP

**60**

**CELLS**



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**


**NH<sub>3</sub>  
S**

**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

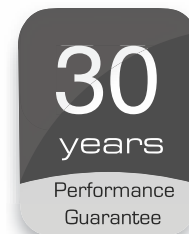
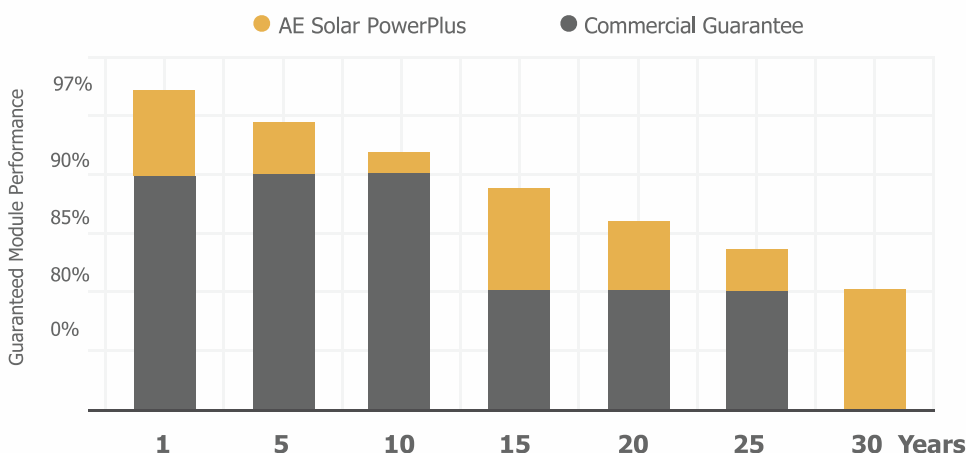
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 **PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

 **PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

 **CERTIFICATES**  
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



 **Deutsche  
Qualität  
Garantiert**

# TECHNICAL DATA

## AE P6-60 Series 265W-290W

### SPECIFICATIONS

		AE265P6-60	AE270P6-60	AE275P6-60	AE280P6-60	AE285P6-60	AE290P6-60
Nominal Max. Power	P <sub>max</sub> (Wp)	265	270	275	280	285	290
Maximum power voltage	V <sub>mp</sub> (V)	30.41	30.82	31.24	31.65	32.07	32.48
Maximum power current	I <sub>mp</sub> (A)	8.71	8.76	8.80	8.85	8.89	8.93
Open-circuit voltage	V <sub>oc</sub> (V)	38.10	38.31	38.52	38.72	38.93	39.14
Short-circuit current	I <sub>sc</sub> (A)	9.26	9.31	9.35	9.38	9.44	9.47
Module efficiency	(%)	16.19	16.50	16.80	17.11	17.41	17.72
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99					
Maximum system voltage DC	(V)	1500					
Maximum series fuse rating	(A)	15					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40					
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31					
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053					
Nom. Operating cell temp.(NOCT)	(°C)	45±2					

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1650 x 992 x 35mm
Weight	17,5 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

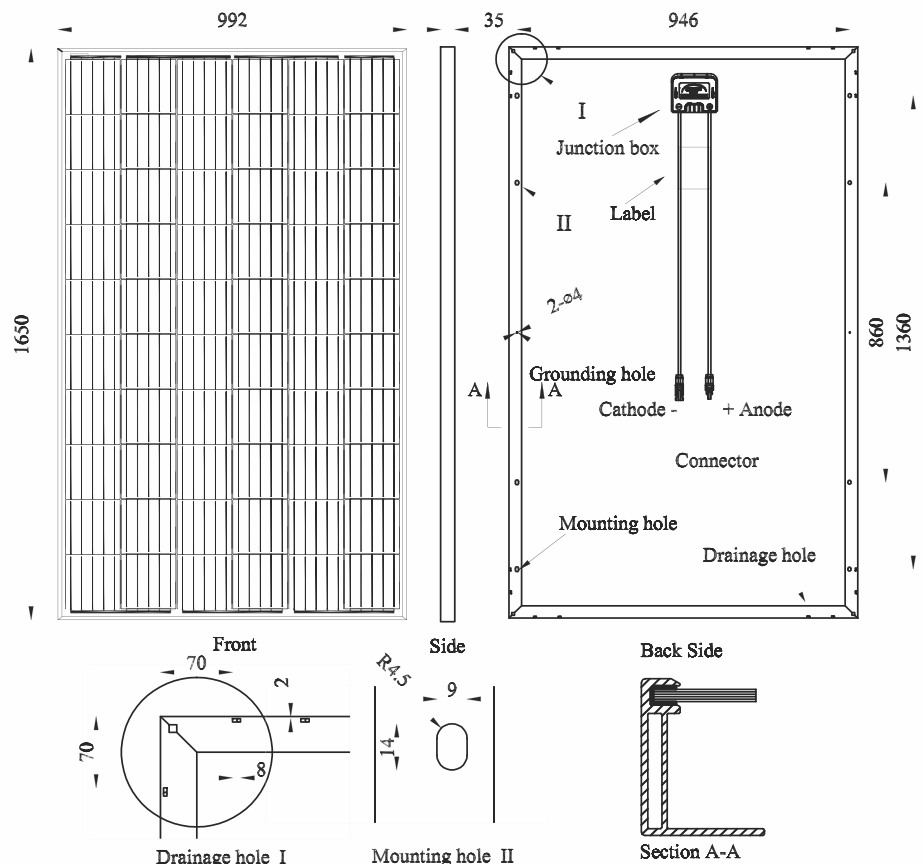
### PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1685 x 1135 x 2390
Weight	1220 kg / pallet

### CERTIFICATES



### DIMENSIONS



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Inspiring green-energy since 2003

## AE POWERPLUS IEC 1500VDC POLYCRYSTALLINE PV MODULES AE P6-72 Series 315W-345W

tested by  **Fraunhofer**  
CSP

**72**

CELLS



**MICRO-CRACK  
FREE**



**PID  
RESISTANT**



**SALT CORROSION  
RESISTANT**




**SAND  
RESISTANT**




**AMMONIA  
RESISTANT**




**HIGHLY STABLE  
AND TOUGH**

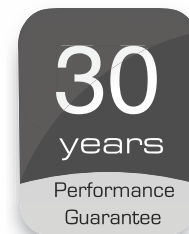
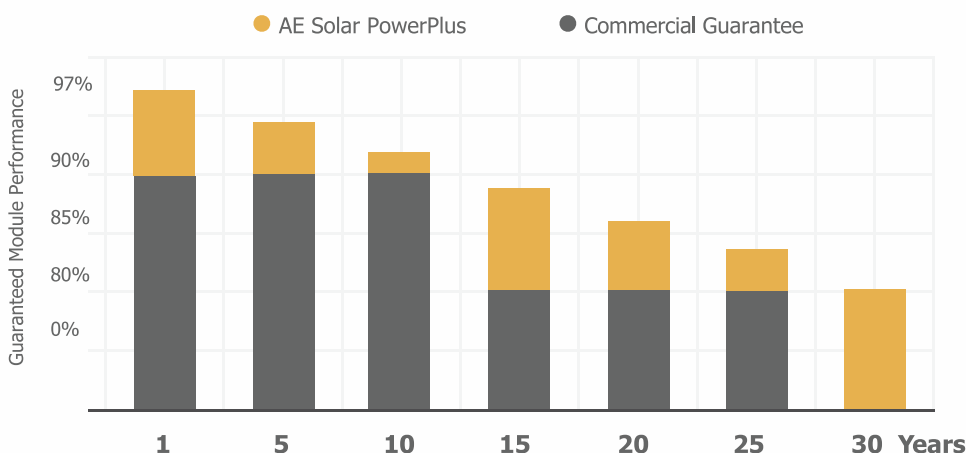
 **GERMAN QUALITY**  
AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

 **PLUS-SORTING**  
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

 **PERFORMANCE GUARANTEE**  
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

 **CERTIFICATES**  
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### OUR PERFORMANCE GUARANTEE



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Qualität  
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# TECHNICAL DATA

## AE P6-72 Series 315W-345W

### SPECIFICATIONS

		AE315P6-72	AE320P6-72	AE325P6-72	AE330P6-72	AE335P6-72	AE340P6-72	AE345P6-72
Nominal Max. Power	P <sub>max</sub> (Wp)	315	320	325	330	335	340	345
Maximum power voltage	V <sub>mp</sub> (V)	36.66	36.75	36.83	36.97	37.05	37.09	37.18
Maximum power current	I <sub>mp</sub> (A)	8.59	8.71	8.82	8.93	9.04	9.17	9.28
Open-circuit voltage	V <sub>oc</sub> (V)	45.59	45.72	45.83	45.89	45.93	45.97	46.62
Short-circuit current	I <sub>sc</sub> (A)	9.24	9.28	9.33	9.37	9.41	9.44	9.61
Module efficiency	(%)	16.23	16.49	16.75	17.01	17.26	17.52	17.78
Power tolerance	P <sub>max</sub> (Wp)	0 / + 4.99						
Maximum system voltage DC	(V)	1500						
Maximum series fuse rating	(A)	15						
Operating temperature	(°C)	-40 to +85						
Temp. coefficients of P <sub>max</sub>	(%/°C)	-0.40						
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31						
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053						
Nom. Operating cell temp.(NOCT)	(°C)	45±2						

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

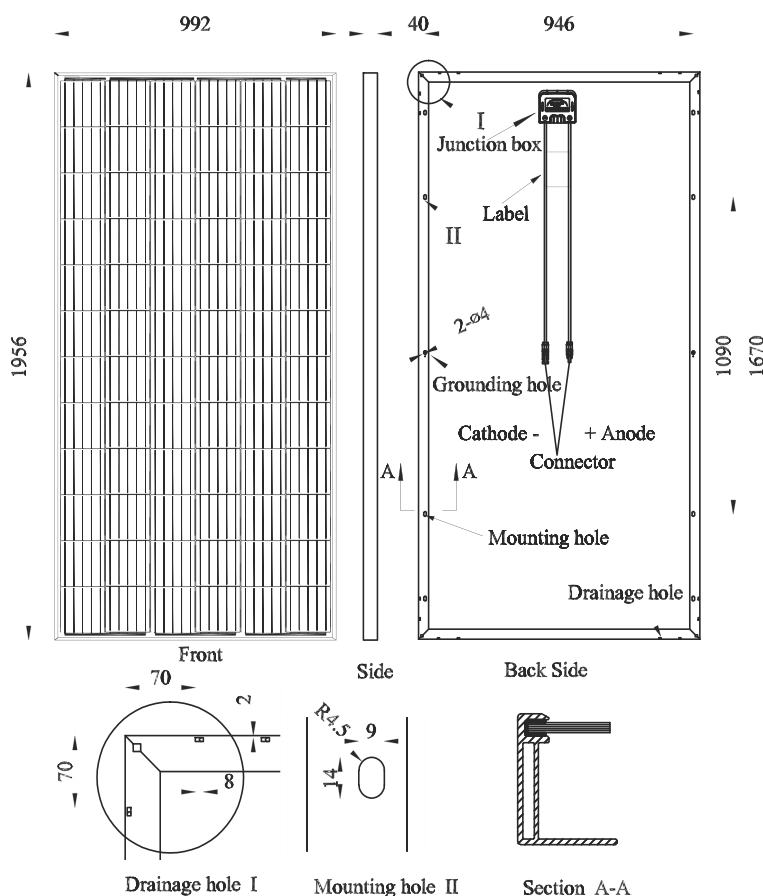
### MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	72 (6 x 12)
Dimensions	1956 x 992 x 40mm
Weight	21 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm <sup>2</sup> , 1200mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

### PACKAGING INFORMATION

Packing configuration	56 pcs / double pallet
Loading Capacity	672 pcs / 40HQ
Size / pallet (mm)	1985 x 1120 x 2410
Weight	1295 kg / pallet

### DIMENSIONS



### CERTIFICATES



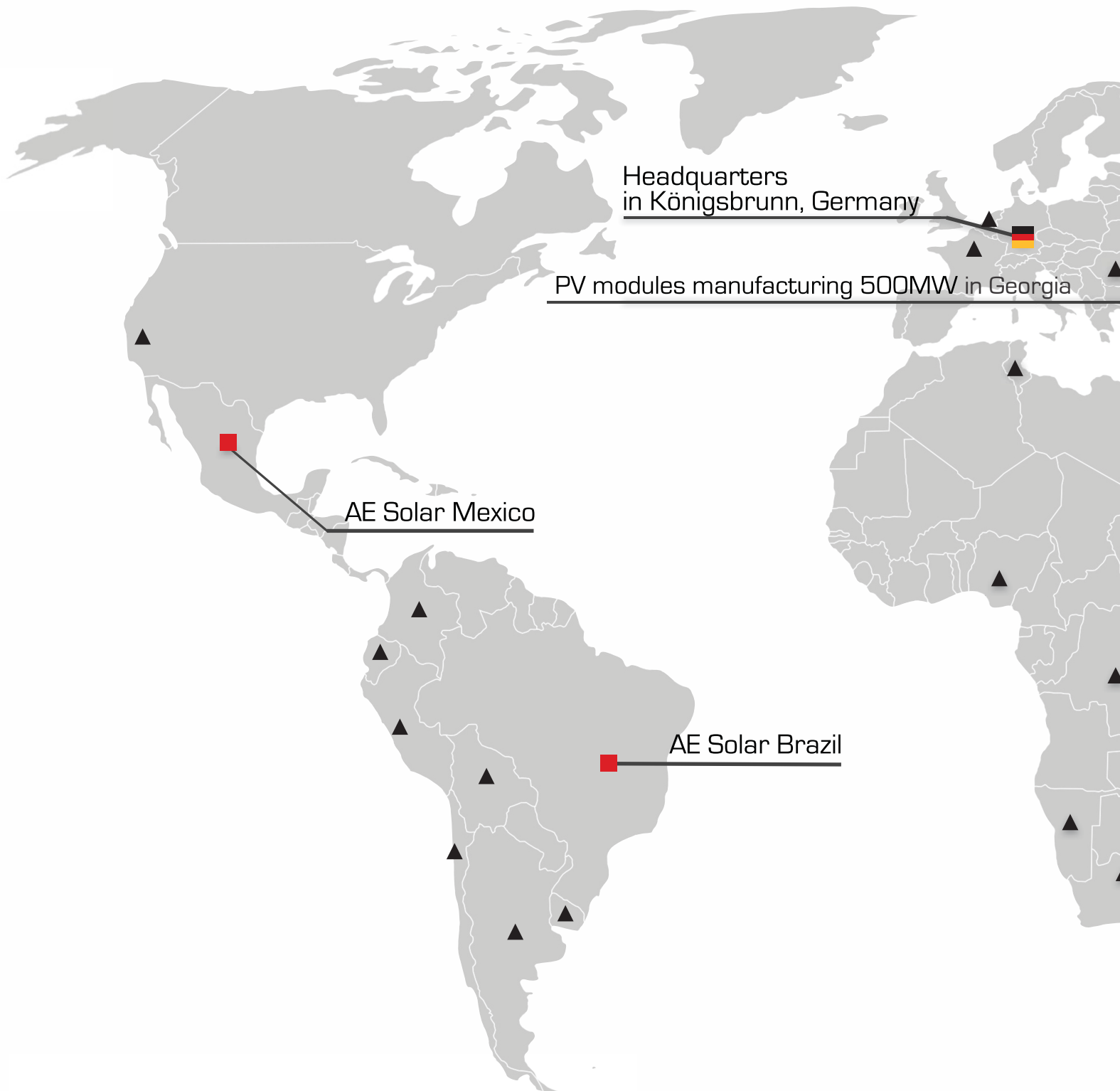
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**AE Solar GmbH**

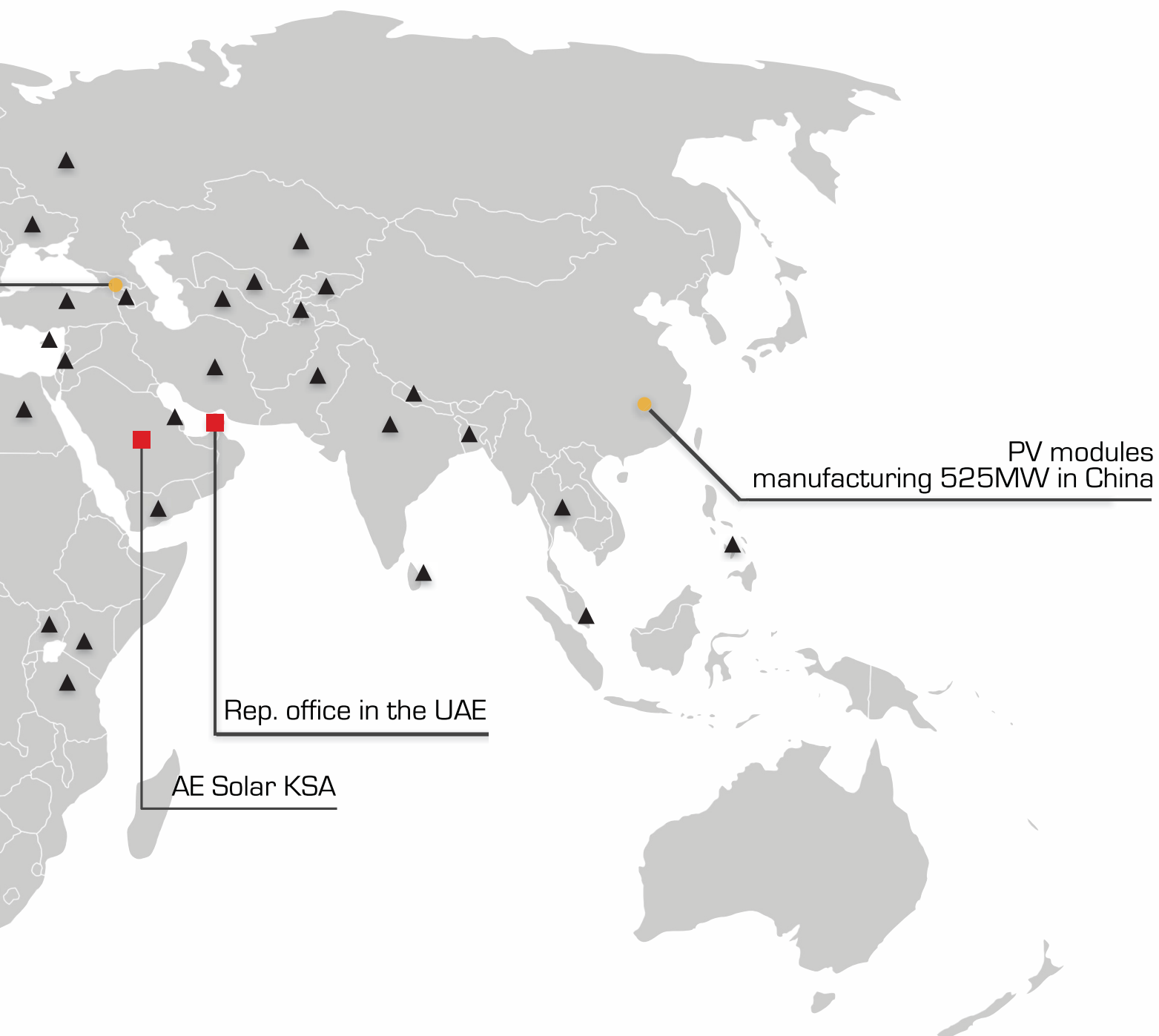
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# AE SOLAR ON MAP



- |   |   |
|---|---|
|  Distributors |  Manufacturing |
|  Branches     |  Headquarters  |







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Note: This presentation is not legally binding.  
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